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FIFTY YEARS OF NUMISMATIC SOCIETY OF INDIA

A. K. NARAIN

In 1961, we can look back to fifty years of the Numismatic Society of India, 1910–1960, with satisfaction for what has been achieved and with promise which its achievements hold for us in the future. Although the first notice on the subject of numismatic research occurs in India in the year 1790 when the discovery of Roman coins and medals was referred to in the 2nd volume of *Asiatic Researches* and the whole of the 19th century not only witnessed the solid foundation of numismatic studies in the country but much progress was registered, it was only in the beginning of the present century that there sprang up a class of numismatists, who were not only very keen collectors of coins and ardent students but were also keen on the co-ordination of the results of these researches and on systematising the studies by affording a common platform for bringing together collectors and students of Indian numismatics. With this end in view the six founders of this Society, viz. Mr. (later Sir) Richard Burn, I. C. S., H. R. Nevill, I. C. S., R. B. Whitehead, I. C. S., H. N. Wright, I. C. S., Framji Thanawala, and Rev. Dr. P. Taylor, D. D. met together for the first time at Allahabad on 28th December 1910 and brought into being a Society called 'The Numismatic Society of India' and invited Sir John Stanley, the Chief Justice of Allahabad, to be the first president of the Society. Mr. R. B. Whitehead was elected the first honorary secretary and the treasurer of the Society. They, along with R. Burn, G. P. Taylor and H. N. Wright, formed the first Management Committee. The annual fee for membership was fixed at Rs. 5 and on the 8th January 1911 an appeal was issued by the honorary secretary, wherein he stated :

"Coin-collecting in India up to the present has proceeded in a haphazard manner. A great deal has been done and is being done by Government and by private collectors, but all have been independent of each other, and there has been no means of co-ordinating the results. This has undoubtedly been attended with wasted efforts and loss. To take only one instance, that of the casual collector, who is interested in numismatics and aquires whatever coins happen to come in his way, he may not know exactly what they are, but it is quite possible that some of them are unique and rare specimens.

As a rule these will eventually be lost, and no record of them will ever be made..."

"The Society is intended to be the co-ordinating body which will promote the knowledge and regulate the study of Indian Numismatics. Those interested in coins will know where they can obtain reference to books, readings of coins they may have picked up and general information on the subject. It is hoped that they will become members. Numismatists elsewhere also may be glad to keep in touch with modern developments in Indian Numismatics by joining the Society.

"There is no intention at present to publish any special periodical. Papers from members of the Society will be inserted in the Numismatic supplement of the Journal of the Asiatic Society of Bengal and copies will be distributed to all members of the Numismatic Society of India.

"The objects of the Society will be attained if members will do what they can to promote and spread a lively interest in the old coins of India. It is hoped that they will themselves become regular collectors. At the least each member can do much in elucidating the Numismatic history of his locality, gathering information and looking out for coins, which if unable to acquire himself, he can enable the Indian Museums to secure. The Committee will be glad to receive contributions on numismatic subjects."

This appeal resulted in the rallying of as many as 46 members round the standard of the Society in the very first year of its inception. There were 13 Indian members.

Rev. G. P. Taylor became the second president of the Society. In his presidential address on the 24th December 1912, he noted the membership of the Society at 67 and which was according to him largely due to the efforts of Mr. R. B. Whitehead. In 1913, Taylor was again the president and he emphasised the need of a Corpus Numismatum for the Mughal period, a Primer of Indian Numismatics and a book on Indian Coins on the pattern of Hill's *Historical Greek Coins* and finally an Atlas of the Mughal Mint Towns of India In the 1914 Annual Meeting of the Society, the president of the year, Nelson Wright, recorded a steady advance in the membership of the Society which reached to 82 and he declared with satisfaction that 'we have now members from England, America, Russia, Austria and Holland as well as from Burma, Singapore and Ceylon" The first memoir of this Society, *On the Coins of Tipu Sultan*, by G. P. Taylor was published.

The president of the year, Mr. Nelson Wright, offered to the Society its first medal which is now known as the Nelson Wright Medal.

Since the most active members of the Society were drawn from amongst the Government officers, it appears that the first World War affected the Society too and all the presidential speeches made from 1914 to 1918 refer to it, but even during that period the membership of the Society increased and the activities of the Society did not cease. The annual meeting of the Society for 1915 held at Lucknow on the 28th January, 1916 adopted the draft Rules submitted by Mr. R. B. Whitehead as the 'Rules of the Society'. Richard Burn noted in his address, "The number of members continues to increase. Only one member has resigned while six new ones have been elected during the year and the total membership at the end of 1916 was 92". Mr. Campbell said in the presidential address of 1917, "The great war lasts; it is inevitable that less attention should be given to the non-essential sciences. Some of our members are actual combatants, and many of our members, most active numismatists, are wholly or partly engaged in war work. Nevertheless the Numismatic Society of India carries on." The war was over and as if to start a new life, the first resolution passed at the original coin conference held at Allahabad on the 28th December, 1910, was reprinted along with the Prospectus of the Society and the rules of it in the proceedings of the Numismatic Society of India for the year 1919. Mr. Richard Burn noted in his presidential address the total membership of the Society as 94.

In 1921, R. B. Whitehead retired as secretary of the Society after a decade of most useful service to the cause of numismatic studies. In fact with the retirement of Whitehead we can mark the close of the first phase in the history of the Society—a phase which witnessed the foundation and firm establishment of the Society. Although there were six founder members of the Society, I think for more than one reason, R. B. Whitehead along with Nelson Wright and Richard Burn may be regarded as the three real founders of the Numismatic Society of India. It is interesting to note that in this phase of the history of the Society, majority of the members were still non-Indians and most of them were either government officers– civil as well as military– or men in high position or of affluent means who took to coin-collecting as hobby although a considerable number turned in course of time devoted students of numismatics.

Mr. Douglas succeeded Whitehead as the secretary but he died in 1926. The second decade in the history of the Society was marked by gradual thinning away of the non-Indian members from the ranks of the Society.

Already in 1926, we note from the presidential address of Mr. H. R. Nevill that the absence of the influence of those giants who formed the Society in the beginning was felt. He noted, "who, we may ask, have taken the place then held by Mr. Nelson Wright, Dr. Taylor, Mr. Whitehead and Sir Richard Burn .....while our number shows no decline it is difficult to refrain from the feeling that the members who are doing active work, either in collection or in Numismatic research, are too few. I am well aware that under present condition coin-collecting is more arduous and more disappointing matter than former days." On 31st December 1926, there were 121 members in the society and about 23 were now Indians. The first Indian president of the Society was Prof. S. H. Hodivala in 1922. In 1927, Hodiwala became the first Indian secretary of the Society. From 1927 onward we note that most of the members who attended the annual meeting of Numismatic Society of India were Indians. Most of the British officers and other Non-Indian members of the Society had either retired or returned home and they were not replaced by their countrymen as active members of the Society. Mr. Nevill noted this in his presidential address of 1928. In his earlier address, while discussing the retirement from the field of more conspicuous collectors and apparent reasons for the dearth of new recruits of the same class, he had noted the depletion of the markets after the war for the coin-collectors and the consequent wanting of the enthusiasm and interest of coin-collection. But in 1928, he thought the condition had improved continuously and it was again possible to glean much from the *Sarrafs*, though the harvest could not be so plentiful as it was in the palmy days of around the turn of the present century. However, he thought it was still possible to form the nucleus of the collection in a relatively short period and he hoped again to see in all provinces a number of enthusiasts whose very zeal must tend to increase the supply. But he rightly noted, "The real question is whether the Indian students, on whom we must depend in an ever increasing degree, is forthcoming in sufficient number. I regard the matter with some concern for it is of much importance. The study of Numismatics and the formation of private collection, fascinating persuits though they be, are not ends in themselves. Numismatics is connected closely with history and the field of Indian history contains a vast extent of ground that has hitherto lain fallow. India

must not sit idle under the reproach that it has done little or nothing to unravel the past and therefrom to learn lessons for the future." But in 1929, Mr. M. F.C. Martin said in his presidential address, "Our Society is in a very satisfactory condition." He noted an all round progress. But he supported the remarks of his predecessor by saying that 'there is apparently a diplorable tendency among most of our members to leave the task of research and writing to those who have already made their names. We have lost most of the stalwarts who founded our society and made it such a success, and we loose more in next few years. Unless others of younger generation step forward to take their place I fear that Society may become more and more moribund as the years progress.

In 1930, the Society was registered under Act XXI of 1960 of the U. P. Government and suitable changes were made in the rules.

In 1931, Rai Bahadur K. N. Dikshit became the president of the Society. He was the second Indian after Hodivala to occupy the chair, but after him, with only two exceptions, we have had always Indian presidents and the number and the interest of non-Indian members started gradually decreasing which was quite natural. Dikshit was also the first Indian Director General of Archaeology and with his association with the Numismatic Society of India we turned a new page in our history. Mr. Dikshit noted in his presidential address that although the passing year would long be remembered as an exceptionally bad year in which financial stringency was a dominant factor and all cultural and scientific activity that depend for their existence upon the active and liberal support of the Government were completely at a stand still and at best in a state of suspended animation, our Society has happily not been seriously affected by the general depression. While realising the significance of the association of the officers of the Archaeological department and curators of the museums with the Numismatic Society of India, he also felt that with the steady diminution in the number of active workers, it is apparent that the future of research in this, as in other fields of activity, lies in its attracting the suitable type of steady and energetic University students and it is to the task of training the new generation that the older professors and museum curators must apply themselves. The stimulus offered by the Society in the shape of medals and prizes for different subjects has proved to be of little avail in the absence of any regular attempts to train students on proper lines at different centres. What is wanting is proper

co-ordination between the authorities of the various Universities that provide numismatics as one of their subjects for post-graduate work and the custodians of our public cabinets. If our Society can act as a liaison body between these institutions, it will not only be furthering research but ensuring the foundations of the cause it represents. In the natural course of things, fresh numismatic discoveries of outstanding merits, both among the officially reported 'treasure trove' finds and in the shroff bazar, tend to diminish and all the material for first hand study concentrates itself in the provincial and state cabinet beyond the reach of the individual student and it is up to the persons in charge of these cabinets to stimulate the intensive study of Numismatics by private researchers in all possible ways.

In 1932, A. Master became president of the Society. The general economic depression which hit every individual and institution, was recorded even by the Numismatic Society of India. But even in the midst of depression, Master struck a bold note by reflecting 'why it is that interest of the public is so keenly aroused and maintained in the currency problem, while the science of numismatics leaves it except for a few enthusiasts such as those present here today absolutely cold" and suggesting that 'it is essential for the progress of any science that its results shall at some time or other win general interest.'

It was not before 1934 that the presidential addresses of the Society became partly academic dissertations and partly survey of discoveries and new contributions. Dr. Pannalal remarked, 'I do not believe there are many persons now who think, as some used to do a few years ago, that coin-collecting is a mere hobby on the level say of collecting stamps, or cigarette tabs. As is well known we are very much handicapped in our studies of our ancient history by the poverty of contemporary historical documents.....', and he noted rightly that the solid contribution made by the study of coins to the cause of ancient history is sufficient justification to invite the general public to come in increasing numbers to share the labour of love. He particularly drew the attention of the University students to join the Society.

K. P. Jayaswal was the president of the Society for 1935. He was the first president of the Society who devoted his entire address to a specific academic problem. He discussed the evidence on the antiquity of the signed coinage in India and the royal coinage of the Mauryan dynasty. Whether one agreed with him or not, Jayaswal, bold and vigorous as

he was always in his hypotheses, provoked new attractions in the subject. Jayaswal repeated his performance in 1936 again as the president of the Society at Udaipur. He devoted his address to the problem of the Yaudheya coinage and discussed numismatic discoveries in the U.P. and Bihar.

In 1937, Dr. Hiranand Sastri, at the Trivandrum session, noted, "The science of Numismatics, I am glad to see, is becoming more popular than it was before.....we have now some 159 members on our list. Out of these the majority are Indians and men of eminence. I remember the days when I was in Lucknow and Mr. Burn was practically the soul of the Society and the Conference was held in his office! It is expanding and we now also meet under royal patronages". Sastri's address was also an academic treat in line with the practice started by Pannalal and Jayaswal. Apart from reporting on new discoveries of coins, Sastri was first to draw the attention of the members to the study of seals and sealings. He discussed some significant seals of considerable importance. He also raised the question of the advisability of holding the meetings of the Society along with the All India Oriental Conference or independently as done before.

K. N. Dikshit in 1938 presidential address suggested that the Society should create and recognise regular local centres in such places as Calcutta, Bombay, Madras, Lucknow and Lahore. And it was in 1938 annual meeting that it was resolved that henceforth the Journal of the Society be published independently as the Journal of the Numismatic Society of India.

Dikshit was elected president for the third time in 1939 and the Society met under the shadow of a world war. But the Society weathered the Second world war even better than the first world war because by now the membership of the Society had crossed the narrow boundary of government officers and army people who could not naturally give precedence to academic pursuits and even their personal hobby over their responsibilities and duties.

Rai Bahadur Prayag Dayal presided over the Lucknow session of the Society in 1941. Prayag Dayal continued to be the president of the Society for three more consecutive years. He noted with great satisfaction the steady progress of the Society and that younger people were coming in larger numbers to the Society. He rightly noted in his presidential address of 1943 that "The Numismatic Society, as I look back on its steady progress and achieve-

ments during the last one-third of a century since its foundation in 1910, has now established its reputation and secured an honourable place for itself amongst the learned societies of the country striving to promote research in the different branches of human knowledge. Its record of service as embodied in the learned contributions of such distinguished scholars as Nelson Wright, Whitehead, Vincent Smith, Jayaswal, Durga Prasad, Bhandarkar and Hodiwala is most creditable of which any Society can feel proud..." In 1945, K. N. Dikshit was elected again after a lapse of five years for the fourth time as president of the Society, when V.V. Mirashi, who was elected as the president for the year 1945 resigned due to his other preoccupations, in the mid-session. K. N. Dikshit was elected for the fifth time again for 1946 but unfortunately he died on 12th August 1946 and Dr. A. S. Altekar was elected in his place. Noting the progress of the Society, he said in his address that "our membership is gradually on the increase...it is in fact much larger than the membership of the History Congress".

It was Dr. Altekar who drew the attention of the various State governments and the Central Government of India for grants-in-aid to the Society in order that the Society could contribute to science more usefully and undertake publications of greater value. He said, the Government of India do not seem to have yet realised that Numismatics is a part of Archæology. They are rightly taking all proper steps to publish old and historical inscriptions through two official journals of their own, *Epigraphia Indica* and *Epigraphia Indo-Moslimica*. For this purpose they have maintained an efficient epigraphical department costing them about Rs. 36,000 in the salaries of editors and assistant editors and about an equal sum for the printing of the two journals. While the Government of India thus spends more than Rs. 70,000 for publishing new epigraphic material, it is strange, nay almost unbelievable, that it should not have organised a similar journal for publishing new numismatic material so valuable for the recovery and reconstruction of history." Dr. Altekar presided again in 1947. Ways and means to improve the finances of the Society and plans for major publications were discussed and the discovery of the famous Bayana Hoard was announced. He also drew the attention if on the eve of freedom the Government would bestow thought on coin device and types suitable to the Indian heritage and tradition.

In 1948, Dr. J. M. Unwala became the president of the Society. His association with the Society was a link with the Parsi community and a source of financial help to the Society

on occasions. He dealt with the problem of monograms on the Indo-Greek coins and the problem of Indian seals. The Constitution of the Society was revised. The Government was urged to appoint properly trained numismatists in the Archæological department. It was also urged that the Government should take early steps to make the counterfeiting of old coins an offence punishable by law courts.

In 1949, Dr. J. N. Banerjea suggested the desirability of undertaking a comprehensive work on the South Indian Coins. In 1950, Dr. V. S. Agrawala presided. His address was remarkable inasmuch as this was the first address in Hindi and though not followed since then, it has no doubt opened the way for others. Dr. Agrawala emphasised the value of literary source for numismatic studies. Professor Mirashi was elected again president for the year 1951. He devoted his address to discussing the problems of Sātavāhana coinage. Besides, he drew attention to the oft-repeated imperative need of cataloguing the large coin-collections of the various State museums and private cabinets and he also mentioned "another field of research which may yield fruitful results in the re-examination of old coins from the facsimiles published by earlier workers like Prinsep, Cunningham, Rapson, Hoernle and Vincent Smith."

In 1952, Shri R.G. Gyani, who had served as the secretary of the Society for some time, was elected president. He drew attention to the work of Thakkura Pheru and to the manuscript of *Tazkirat-U-Sukuk* at the Kala Bhawan and he also described the importance and significance of the medieval currency known popularly as Lari, specially designed for and circulated mostly in the coastal areas of Asiatic countries.

In 1953, Dr. Motichandra presided and he emphasised the literary data on coins, the importance of coins as a source of religious history, the metallurgy of coins and the symbolism of punch-marked coins etc. In 1954, Dr. P.M. Joshi delivered his presidential address on some lesser known facts of Indian Numismatic history. He gave useful information from the Maratha records. Persian literature, contemporary reports of the English Factories and European travellers and thus threw open new avenues for Numismatic studies. In 1955 and 1956, Dr. D.C. Sircar presided. He indulged in some self-criticism of the work of the Society which was necessary and which was definitely in the interest of the Society and quality production of numismatic studies. He also announced a new decision that the Epigraphy branch of the Department of Archaeology had seriously

undertaken the studies of coins and, arrangements had been made for the inclusion of coins examined by the Branch in the Annual Report on Indian Epigraphy. He noted numismatic studies and research should be more popular and special posts of teachers of Numismatics should be created in the Universities. He also noted, "as yet coins do not play any part in the teachings of history and geography in the schools and colleges of India." He emphasised the need of studying the coinage of other countries too.

In 1957, Shri C.R. Singhal presided at Delhi and gave some useful suggestions for the improvement of the *Journal*. In 1958, Dr. H. V. Trivedi drew the attention of the Society to implement its earlier resolution in regard to the treasure trove, requested the governments for nationalising the law in the interest of academic pursuits and to stop the distribution of coin hoards without prior study and cataloguing. He also emphasised the need of having a museum of the Numismatic Society of India. In 1959, Dr. P.L. Gupta mentioned in his address among other things the necessity of cooperation between the mints and the Society, proper examination of coin-hoards and even coins found in excavations by trained numismatists. He also drew the attention of the government to some aspects of the Export of Antiquities Act so far as the coins are concerned. In 1960, Shri S.V. Sohoni emphasised the methodical collection of maximum coin-data, correct sorting out and description of old coins within prescribed time and publication of analysis.

Nature and Scope of Society's Activities

The nature and scope of the activities of the Society have been in keeping with its aims and objects and through the last fifty years they have gradually taken new dimensions. Originally one of the primary aims in founding the Society was to co-ordinate the labour of coin-collectors and results of their studies, thereby promoting the knowledge and regulating the study of Indian Numismatics. It was thought that the objects of the Society would be attained if members would do what they could to promote and spread a lively interest in the old coins of India. It was noted that they would themselves become regular collectors and Indian coin-collectors were invited to join the Society. It is thus clear that the Society was started first as providing a forum for the coin collectors and in fact all the founder members and the majority of members of the Society in the first few years were coin-collectors. The members of the Society were invited to meet once a year, generally towards the end of December, when the Committee of management and the office bearers for the ensuing year

were elected and the numismatic discoveries during the year were reviewed and members had the opportunity of discussing problems of common interest and help one another in the examination and assignment of difficult or unidentified coins. Here they also had an opportunity of seeing and exhibiting unique and rare coins and listening to the illuminating presidential addresses. All these transactions as well as other useful information including the names of the members with the subjects in which they had specialised were published in the annual proceedings to facilitate mutual correspondence by members regarding the examination, assignment, purchase and sale of coins.

After few years, in view of the large number of members residing in the Bombay Presidency, it was thought desirable that they should have special facilities for meeting to discuss numismatic matters. A special sub committee consisting of a president and 3 members residing in the Bombay Presidency was formed with power to hold meetings for the discussion of subjects of general interest to the Society and for the purpose of making recommendations to the central committee. The president of the sub-committee was to be a member of the Central Commitree. Mr. Khareghat was nominated president of this Bombay sub-committee for the year 1920. The sub-committee thereafter called meetings at its discretion and proceedings were recorded in the usual way and forwarded to the secretary. But this practice of having a regional centre could not continue for long. We hope now, after a better awareness of the importance of numismatic studies, it will be possible before long to have at least one centre in each province affiliated to the central body.

It is clear from the proceedings and presidential speeches of the first years that the problems which concerned the coin collectors weighed more than the problems of research as such although indirectly by looking to the interest of the coin-collectors the purposes of research also were served.

Members of the Society who were mostly coin-collectors themselves used to be very much concerned if their sources of supply of coin became unresponsive for one reason or another. During the years of the first world war, this was noted in all the presidential speeches. It is interesting to find Dr. Taylor drawing the attention of the meeting to the continued paucity of coin finds as in the preceding two years. He noted, "On this absence of new coin material it becomes desirable to reiterate the recommendations made last year, that special attention be now given to a systematic collection

and collection of the coin reference contained in original authorities." Mr. Campbell remarked in his presidential address of 1918, "The past year has been even more barren in coin-finds than its immediate predecessors. Even the most ardent collector can have added very little to his cabinet and now that the war is so happily ending we may look forward to renewed activity in all fields of Indian numismatics."

But what was a hobby soon turned to be an academic interest and responsibility for some and it would not be an exaggeration to say that for this transformation the Numismatic Society of India was largely responsible. The Society has indeed enabled many coin-collectors to turn into scholars of numismatics and this process continues even to this day. If not for anything else, this alone justifies the existence of this Society on the one hand and, on the other, musters new workers to the wider field of Indology.

In 1945, suggestions were made for constructive work by the Society and a number of topics were singled out for research. It is interesting to note the following from Richard Burn's presidential address in 1916. "I think, perhaps, that work will be facilitated if the Society were to recognise correspondents or experts in various definite fields of Indian Numismatics. The experts could be chosen in the first place at a General Meeting (subject to their assent), and vacancies filled later by the Council, subject to confirmation at the succeeding General Meeting. The appointment would encourage specialized working and would be of great assistance to members of the Society. One often feels at a loss to track down the place of publications of a coin, or to know whether a rare type has been published before or not. In India especially, where many of us have to work far from libraries, and have to seek our requirements from half a dozen serial journals, the need for a reference is especially great. At present something of the sort is already done. We turn to Mr. Thanawala or Mr. Paruck for Sassanian coins, to Dr. Taylor for information about Ahmadabad and Gujrat, to Mr. Whitehead for Greek coins or the Mughal mints and to Mr. Botham for Assam. Such experts should prepare bibliographies, indexes and the rest of the apparatus criticus of the numismatist. In time some of these collections will be worth printing for reference. Others can remain in manuscript and be handed over to the secretary, when an expert is no longer able to undertake the work, till another is found. The expert would also keep in touch with European students and the keepers of Cabinets in Europe. Their names and address would appear in the

annual report for easy reference by members." A tentative list of subjects with experts' names against them was published in the Society's proceedings for 1916. The entire field was divided into twenty-five subjects. The Society also started the practice of appointing honorary numismatists to the various State governments, museums and learned societies like Asiatic Society of Bengal to help them.

In 1930, the Society resolved to issue a list of members who were keen students of the periods shown against their names and who requested correspondence with other members on their subject. The list was regularly issued from 1930 for about a decade. When the new prospectus was issued in 1959, again a list of members with their specific interest was published. We hope to make this a regular feature. We still need to follow up the suggestions made by Sir Richard Burn. With the introduction of members from among the officers of the Department of Archæology, curators of the museums and University teachers and students, the scope of the activities of the Society naturally widened and the responsibility increased. The Society took upon itself the task of promoting the cause of numismatic studies and was not merely content to be a forum of government officers, military personnel and men of money who could afford the costly hobby of coin-collecting. The Society found its responsibility increased by urging the Universities to organise the teaching of numismatics, by asking the museums and archæological departments not only to have trained numismatists but also to organise their coin-collection and publish catalogues or lists of their acquisitions. In fact the Society offered the services of its members for such works. In 1918, already, Mr. Whitehead had made brief suggestions on the following lines to the Archæological Survey of India in a letter addressed to the Director General of Archaeology:

(i) Catalogues on an abbreviated model are required for the collections in the less important museums;

(ii) All catalogues should be kept up to date by the issue of periodical supplements;

(iii) Collections should be freely shown under adequate supervisions to visitors who wish to see them;

(iv) The minor series of Indian coins call for proper publication;

(v) It is essential that important museums should be able to supply good casts of coins and gems.

(vi) A combined electrotype exhibit of the best coins in all the Indian museums would be much appreciated by the visiting public.

And in 1919, the Society resolved to urge upon the Director General of Archaeology the pressing necessity of the appointment of a numismatist on his staff and asked him to convene at an early date a meeting of numismatic experts including provincial curators to discuss the various pending questions and to frame the principles which should guide numismatic procedure of research in India.

From the time of K. N. Dikshit, the cooperation with the Archaeological Department has been gradually and appreciably increasing. Most of the senior officers of the Archaeological Department and almost all the curators of the museums in India are now members of the Society and they are doing their best to help the cause of the Society and numismatic studies. The present Director General of Archaeology, Shri A. Ghosh, has been actively helping the Society and I am sure his example will be followed by others. So also some of the State governments like Bombay and U. P. and museums like the Prince of Wales Museum have been of help to the Society.

As the guardian of the numismatic studies and the only institution to serve the cause of this science, the Society felt obliged to draw the attention of the Government also to the drawbacks in the laws concerning treasure trove and export of antiquities etc., and their application. In 1932, it was resolved that the local governments be requested to furnish copies of the reports of their treasure trove examiners as received from time to time to the Secretary of the Society for information. In this connection a treasure trove committee of the Society was formed in 1958 to take up the question with the Government of India and it is expected that steps will be taken in this direction soon in consultation with the Department of Archæology.

In order to promote numismatic studies, medals and prizes were awarded. In 1914, the Society accepted Nelson Wright's offer of the die for a medal to be awarded annually for the best contribution by a member of the Society towards the study of Indian numismatics. From 1916, this Medal has been awarded annually with odd intervals when no award was made. Normally it was of bronze but sometimes for major contributions this was awarded in silver and gold. In 1926, the Society also resolved that an Annual Prize Essay on subjects connected with

numismatics be instituted and a silver medal was to be offered to the prize winner. But this could be awarded only for four years between 1927 and 1935. In 1950, the discovery of Bayana hoard led to the introduction of the Chakravikrama Gold Medal which was awarded to Maharaja of Bharatpur and Chakravikrama Silver Medal awarded to Prof. K.C. Sharma for their respective role in the discovery of the largest ever hoard of gold coins in the country. In 1956, the Chakravikrama Gold Medal was awarded to Prof. A.S. Altekar. In 1950, the medals were re-classified with a view to making their award regular and on rationalised basis: the Chakravikrama Gold Medal to be awarded every seven years for a major work of importance, Akbar Silver Medal every five years, Nelson Wright Bronze Medal every three years and an Essay Prize every year for contributions of relative merit.

Contributions by the Members of the Society and the Publications of the Society

In the earlier years, the Society seems to have taken a very keen interest in the preparation of the lists or catalogues of collections lying in various museums and with the private collectors. The original members took upon themselves to prepare the catalogues in their own province and constantly pressed on the Provincial governments in other parts of India to have this work done at an early date. They even undertook to train candidates for the purpose. With their influence and competence they succeeded in obtaining a good response and encouragement in this direction. In 1912 for instance, Whitehead was relieved of some of his official duties by the Punjab Government with a view to allow him leisure enough for the preparation of the catalogue of coins in the Central Museum, Lahore, and was further permitted to proceed on furlough to England to see the catalogue through the press. This resulted in the publication of two valuable volumes of the *Catalogue of Coins in the Lahore Museum* in 1914 which remain the standard publication in the branches of Indian numismatics to which they relate. In the same year the *Catalogue of Gupta Coins in the British Museum* was published by one of our members, J. Allan, whereby our knowledge of these coins was materially advanced, particulary regarding the metrical character of the legend. H. E. Stapleton's *Catalogue of the Provincial Cabinet of Eastern Bengal & Assam Coins* was published in 1911. I. J. Michael published his *List of Coins in the Mac Mohan Museum, Quetta in* 1912.

Then the issue of the catalogue of Mughal coins in the Lucknow Museum by C. J. Brown and that of the Sultans

of Delhi by Prayag Dayal in the year 1920 and 1925 respectively brought many new coins to light. Bleazby like his earlier lists of coins in the museums at Srinagar and Rangoon, undertook to prepare a catalogue of the coins in the Nagpur Museum and issued it in the year 1922. *A Catalogue of Coins of Indian States* compiled by Henderson, C. J. Brown and Valentine was edited by J. Allan and issued in 1928. *Catalogue of the Provincial Coin Cabinet in Assam* was published by A. W. Botham in 1930. *The Catalogue of Durrani Coins in the Lahore Museum* by Whitehead issued in 1933 proved the necessity and advantage of dynastic catalogues of coins in a comprehensive style. The authorities of the Prince of Wales Museum, Bombay, also followed suit and the *Catalogue of Coins of the Gujarat Sultans* compiled by C. R. Singhal and edited by G. V. Acharya was brought out. This and the *Catalogue of the Coins and Metrology of the Sultans of Delhi* in the Museum of Archaeology at Delhi by H. N. Wright include even the coins that are in other cabinets and as such can be termed as a corpii on the respective subjects. This welcome phase of cataloguing facilitated study to a very great extent and the students were spared the trouble of turning over the pages of various publications for a single subject. Thus almost all the important museums in India through their various experts contributed their own quota by issuing the catalogue of their treasures for the use and reference of scholars working in different branches of Numismatics. G. H Khare prepared a *Catalogue of Coins in the Bharat Itihasa Samsodhaka Mandal, Poona* in 1933. In 1936, Allan published another important volume of the *Catalogue of Indian Coins in the British Museum*, London, dealing with ancient Indian punch-marked coins and local and tribal series. N. K. Bhattasali's *Catalogue of Coins of the Dacca Museum* was published in 1936 and Samsuddin Ahmad's *Supplement to Vol. II of Catalogue of Coins in the Indian Museum, Calcutta* was out in 1939.

Apart from the catalogues and lists, the members have also published from time to time useful monographs and books dealing with the general aspects of coinage in India as well as on specified coin series of an area or of a period. W. H. Valentine's *Modern Copper Coins of the Mohammadan States* was published in 1911 and the *Copper Coins of India (Bengal and the United Provinces) Pt I* and *Pt. II (Royal and Contiguous Native States)* in 1914. R. P. Jackson published his *Coin-collecting in Mysore* in 1909 and the *Dominion, Emblems and Coins of the South Indian Dynasties* in 1913. Henderson's work *The Coins of Haidar Ali and Tipu Sultan of Mysore* was

published in 1921. In the same year Bhandarkar published his *Lectures on Ancient Indian Numismatics*. In 1922, Whitehead's *The Pre-Muhammadan Coinage of North-western India* was published, and his *The Coins of the Dutch East India* in 1931. In 1931, S. K. Chakraborty's work *A Study of Ancient Indian Numismatics* was published and in 1938 his monograph *Currency Problems of Ancient India*. T. Desikachari published his *South Indian Coins* in 1933 and along with T. Rangachariar he published later in 1946 *Dravidian Coins—the Pandyas and Cholas and Their Coinage*.

The Society also published on its own some valuable monographs inspite of the very limited resources at its disposal. The work entitled *The Coins of Tipu Sultan* by G. P. Taylor was published in 1914 as the Occasional Memoirs of the Numismatic Society of India, No. 1 and *A Study of Mughal Numismatics* by S. H. Hodiwala was published as No. 2 in 1923. These scholarly treatises gave good deal of ready-made material and a great impetus to the study of the coinage of the Sultan of Mysore and the Mughal Emperors of Delhi respectively.

The Society published Birbal Sahni's *Technique of Casting Coins in Ancient India* in 1945 and F. D. J. Paruck's *Mint Marks on Sassanian and Arab Sassanian Coins*. Right from the first years of the existence of the Society, the imperative need of compiling an exhaustive list of Mughal Mint Towns was felt and R. B. Whitehead was entrusted with this work. He published his valuable list in the *Journal of the Asiatic Society of Bengal* (New Series) Vol. II, III, 1912, but finally the Society published in 1953 its Memoir No. 4 entitled *Mint Towns of the Mughal Emperors of India* by C. R. Singhal.

An important milestone was reached when C. R. Singhal's two volumes of *Bibliography of Indian Coins* were published in 1950 and 1952 respectively. In 1954 came out a major publication on the famous Bayana Hoard entitled *Catalogue of the Gupta Gold Coins in the Bayana Hoard* by A. S. Altekar. This book has verily become an indispensable book of reference for students of Gupta coins.

In view of the long felt need of having a corpii of Indian coins, the Society under the able initiative of the late Professor A. S. Altekar took steps to obtain the cooperation of the Government of India for the publication of the ten volumes of the corpii, Vol. IV of which, *The Coinage of Gupta Empire* by A. S. Altekar came out in 1957. Vol II dealing with the coinage of the Indo-Greeks by A. K. Narain is ready for the press. A part of Vol. I dealing with the

punch-marked coins by P. L. Gupta is also ready for the press.

In the beginning, as has been noted above, it was neither the aim of the Society nor could it afford to have its own *Journal* and the contributions of the numismatists were published in the Numismatic Supplement of the *Journal of the Royal Asiatic Society of Bengal* or in the pages of the *Numismatic Chronicle* of London. The Numismatic Supplement of *The Journal of the Royal Asiatic Society of Bengal* in fact started to appear from 1904–even earlier than the foundation of the Numismatic Society of India. To quote from the Supplement No. 1 :

"This supplement has been started primarily in the hope that coin-collectors in India may find it convenient to chronicle in its pages notices of unpublished or rare coins which they may obtain from time to time.

"It is also meant to include notes on other subjects of antiquarian and philological interest which by themselves might not afford sufficient material for a paper in the main body of the Journal. It is a matter of common experience that casual finds by private persons of highly interesting coins are not made public with the freedon that is desirable. Almost all private cabinets contain specimens which their owners have not had any inclination or inducement to publish in any recognised Journal."

When the Society was founded in 1910, members were asked to contribute their papers to the Numismatic Supplement and the papers were edited by a member of the Society. Thus in effect the appearance of Numismatic Supplement in 1904 may be noted as the beginning of the Numismatic Society of India.

At the annual meeting of the Numismatic Society of India held at Calcutta on 26th December, 1938, the following resolution was moved from the Chair and passed unanimously:

"Resolved that henceforth the journal of the Numismatic Society of India be published independently as the *Journal of the Numismatic Society of India*".

The resolution gave expression to a long felt desire of the members of the Society to have their own *Journal* and marked the termination of the arrangement under which papers contributed to the Numismatic Society of India had been published as the Numismatic Supplement to the *Journal of the Royal Asiatic Society of Bengal.*

We have now issued twenty-two volumes of the Journal and we are up-to-date. It may not be out of place here to note that the *Journal of Numismatic Society of India* is one of the most regular learned *Journals* of India. We exchange this journal with about thirty *Journals* of India and abroad; our contributors include authors from U.K, U.S.A., Germany, Russia, Austria, Italy and so on. If more funds are available, we can issue 3 numbers a year and improve the quality of plates and printing.

In 1954, the Society decided to publish a Numismatic Notes and Monograph series devoted to bibliographies, coin lists, inventories, indices and specialised essays and other useful handy material relating to Indian coins, medals, seals and allied subjects. Already nine monographs have been published up-to-date under the general editorship of A. K. Narain. They are *The Coin Types of Indo-Greek Kings* by A. K. Narain, *A Bibliography of the Hoards of Punch-marked Coins of Ancient India* by P. L. Gupta, *The Bactrian Treasure of Qunduz* by A. D. H. Bivar, *The Coin Types of the Saka-Pahlava Kings of India* by G.K. Jenkins and A.K. Narain, *The Inventory of the Hoards and Finds of Coins and Seals from Madhya Pradesh* by B C. Jain, *The list of Published Satavahana Coins* by M. Rama Rao, *The Coin Types of Kings with Mitra ending Names* by Mrs. Bela Lahiri, *The Stratigraphic Evidence of Coins in Indian Excavations and Some Allied Issues* by S. C. Ray and *The Gold Coin-Types of the Great Kushanas* by A. H. Wood III.

Building and Funds

In the absence of any permanent building, the headquarters of the Society has been shifting from place to place. Finally in 1957, the Banaras Hindu University offered free land for the construction of our building Funds were raised from the Government, Charitable Trusts and members of the Society and a sum of about Rs. 35,000/- has been collected up-to-date. The Vice-President, Dr. S. Radhakrishnan, will kindly lay the foundation stone of the building on the occasion of the Golden Jubilee Celebrations of the Society on the 25th December, 1961. As resolved at the Gauhati Session of the Society, the building of the Society will be known as Altekar Smarak Bhawan. At present we are in a position to construct only the ground floor but we hope to raise the funds in due course to enable us to construct the first floor as well as to expand the building. With the construction of this building, naturally our activities and responsibilities will also increase. The Society has its own Library, the nucleus of which is the Taylor Library. It is

at present small and it has not been possible to increase the number by purchase. It consists mainly of books and monographs received either as presents or in exchange. The library is now being reorganised and a catalogue will soon be prepared. Attempts are being made to get grants from the Government and Public Trusts to augment the library.

The financial resources of the Society for recurring expenses consist of the membership subscriptions and small grants received from the majority of States in India and from the Union Government. Our membership now totals 411 which include 40 institutional members. Naturally we cannot expect much from the membership subscription to meet the cost of our new activities. The States and the Union Government have to come to the rescue of the Society. It is a pity that even now some of the State governments are giving only Rs. 300/- per annum and expect us to give them ten free copies of our journal, that is to say, expect a return of Rs. 250/- from us, with the result that we receive only Rs. 50/ in the year from most of State governments. The Bombay Government is the only exception. The Union Government also for the last few years is giving only Rs. 3,000/- per annum, which, though of great help, it will be admitted, is a meagre sum and does not meet even the cost of the publication of our *Journal*. Students of Numismatics feel this very much specially in view of the fact, as rightly pointed out by the late Prof. A. S. Altekar few years ago, that the Union Government spends a big amount to maintain a fully equipped department of epigraphy under the Archæological Survey of India. No student of Indian history and culture can deny that numismatics is equally important as a primary source material for the reconstruction of our history and culture. We therefore propose to prepre a master plan soon for the consideration of the Government of India. I hope this will have the support of all concerned.

A SURVEY OF INDIAN NUMISMATOGRAPHY*

(*Pre-Muhammadan Coinage*)

1738-1950

J. N. TIWARI

Numismatics was recognised as a primary source of history and was utilised for historiography in India as early as the 12th century by Kalhaṇa, the Chronicler of Kashmir. But in the modern context of historiography—in which the West has played an important part—it became an auxiliary science to history only at a relatively late date. It was in the era of Renaissance, when the emergence of humanism in Europe evoked interest in antiquity that the first great collections of coins were made. At first connoisseurs admired only the aesthetic qualities of these little masterpieces of art, but later, particularly in the 18th century, the importance of numismatics for the study of history was also recognised.

The earliest contribution relating to Pre-Muhammadan coinage of India may be traced back to 1738 when two coins of the Greco-Bactrian kings suggested to Theophilus Bayer the plan of his *Historia Regni Graecorum Bactriani* published at St. Petersberg in 1738. Sometime later a coin of Euthydemus was published by Pellerin. In 1799 a coin of Heliokles was found by Mionnet. But in India perhaps, the first notice on the subject of numismatic research occurs in the year 1790, when the discovery of Roman coins and medals was referred in the 2nd volume of *Asiatic Researches*. Though coins were noticed rather rarely in learned periodicals, beginnings were made in collecting coins.

For some time coins remained objects of curiosity, a source of marvel and a means to discover new kings and dignitaries. army officers, engineers and those who were concerned with field work took to collecting coins both for their own pleasure and for the purpose of adding new pages to history. But the organised study of coins as coins, the science of numismatics as such, did not begin earlier than

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* This paper has been prepared under the guidance of of Prof. A.K. Narain and material have been freely drawn from articles by G. V. Acharya and R. G. Gyani written on the occasion of the silver Jubilee of the Society and by A. S. Altekar in *JNSI*, Vol. XIII; in fact section IV of this paper is almost a reproduction with minor changes.

the beginning of the 19th century. In U. K. Numismatic Society (later it become Royal Numismatic Society in 1907) was organised only when few Fellows of the Society of Antiquaries met on June 22nd, 1836.

I. The Beginnings of Indian Numismatography—the period of Discoveries and Decipherment (upto 1850).

The first quarter of the 19th century was not very productive from the point of view of numismatography. In Europe Mionnet in 1811 and Visconti in 1814 published the different Indo-Greek coins discovered in the earlier century, and specimens of them were sparingly multiplied in Europe through Russia and Persia. In 1822 Koehler discovered a coin of Antimachus Theos, and in 1823 he procured at Bokhara a coin of Demetrius from the Russian Ambassador Count Meyendorf. But "a new impulse and accelerated progression were communicated to Bactrian numismatics" through the publication in 1824 in the first volume of the transactions of Royal Asiatic Society of a memoir by Col. Tod upon Greek, Parthian and Indian medals illustrated by engravings. Col. Tod employed persons to search for coins from Mathura and other Indian cities of celebrity. In a period of about 12 years he accumulated about twenty thousand coins of all denominations including 4 coins each of Apollodotus and Menander discovered for the first time. These discoveries constitute an era in the history of Indo-Greek numismatics. The coins described and figured by Tod soon became the subject of an interesting and useful dissertation by Augustus Wilhem Von Schlegel, which was published in the *Journal Asiatique*, Nov. 1828. In fact this was the first critical attempt to reconstruct a period of ancient Indian history from coins.

The adventurous curiosity of General Ventura, an army officer in the service of Ranjit Singh, led to remarkable discoveries in the Punjab in 1830 and the explorations of Burneas on his route to Bokhara and the success of Swiney at Karnal in collecting Bactrian and Indo-Scythian coins opened strikingly new possibilities and a sort of 'eureka' spirit in the time.

The exploration of an American, Charles Masson, in Afghanistan proved to be of great value in the advancement of numismatic studies. The publication by Masson of the three memoirs from 1834 to 1836 on the coins discovered by him must be counted as a turning point in the study of Indian coins, and it gave Prinsep not only a chance to interpret the numismatic evidence but it led to the discovery of the ancient Indian alphabet.

The increasing number of discoveries naturally imposed a responsibility on those who were capable of utilising them academically and thus make contribution to the history of culture of India. Wilson and Prinsep played their part in this task most creditably in India. But no attempt was made to form a museum for coins and there were not many private individuals in India who had the means or opportunities of forming collections of coins. However, the first listing of coins in the cabinet of Asiatic Society was made by Wilson in 1831. Wilson was not only assisted by Prinsep but the latter had already started compiling independent lists of some series of coins.

Prinsep took upon himself the task of preparing a catalogue raisonne of the contents of the drawers of the Asiatic Society's museum coin cabinets because he thought that "although it may expose our present poverty, will, I doubt not, by a wholesome reaction, tend to our future enrichment, both by establishing a nucleus to which the antiquities henceforth discovered will naturally be attracted, and by affording to enquirers, who may not have the opportunity of consulting books on the subject, some clue however insufficient to the decyphering of worn and imperfect metallic remains, which appear to a novice to defy scrutiny." He published his first catalogue raisonne of the Roman coins in the collection of the Asiatic Society in 1832 and in the year following, of the Greek coins. In 1830 General Ventura had already excavated the Manikyala Tope and found a number of coins of the Śaka-Kushāṇa dynasties. Lt. Burnes, Dr. Martin Honigberger and especially Mr. Masson followed in the track pointed out by the success of Ventura and their subsequent collections materially contributed not only to demonstrate the value of such enterprises but also to our knowledge. His own account of excavations was published in the Calcutta newspapers of the day and was afterwards inserted by Wilson's essay on ancient Indian coins in the seventeenth volume of *Asiatic Researches*. Some of the coins became subject of discussion and investigation in Paris. These pioneers of numismatic discoveries not only competed in their adventures and discoveries but also in their disinterested liberalities in placing their materials for study and classification at the disposal of scholars. Prinsep was very much touched by such self-denials and disinterestedness.

The Numismatic discoveries and investigation which was vigorously and successfully prosecuted in India became equally the object of interest and research in Europe. We have already noted such interest from Bayer to Schlegel.

The earliest as well as one of the most eminent European archæologists who resumed the subject of the numismatic illustration of Bactrian history was M. R. Rochette. Two medals from St. Petersberg furnished the occasion of two articles published by him in *Journal des Savants*, June and July 1834. Notices of Dr. Honigberger's travel and collections in the Punjab, Afghanistan and Soviet Central Asia were published in the Russian and German papers at the end of 1834. Rochette published an account of his collection in the *Journal des Savants* in October 1835. Notes on Dr. Honigberger's collection was also published in *Journal Asiatique*, 1836-1839 by M. E. Jacquet. Jacquet also published an account of the coins collected by G. Allard's coins in the *Journal Asiatique* in February 1836. A descriptive list of 143 Bactrian Indo-Scythic coins compiled chiefly from the Memoirs of Jacquet and Rochette, was included by Mionnet in the eighth volume of Supplement to his great work on Classical Numismatics published in 1837.

In 1838, Lassen published his *Zür Geschichte der Griechischen und Indo-Skythischen Könige in Baktrien, Kabul und Indien* from Bonn, which was soon translated into English by Dr. Roer, in *JASB*, 1840. Lassen's work is rather a work of history than of numismatics. Perhaps, he is the first historian of ancient India who successfully used numismatics.

In 1841, Wilson gave a readable summary of numismatic researches up-to-date, and also treated the numismatic and other archaeological material in detail. In Europe, besides Lassen, Raoul Rochette, Mionnet and others were making valuable contributions. The end of this phase saw the debut of Alexander Cunningham, who was to dominate the whole period of the second half of the 19th century by his indefatigable researches.

II. 1850-1900: The Period of Classification, Cataloguing and Survey.

The romance of the discovery and decipherment of new coins continued to attract the attention of the scholars in India and Europe. This encouraged on the one hand the counterfeiting of coins by the dealers and on the other it impressed upon the scholars the urgent need of classifying and cataloguing the various series of coins. It is no exaggeration to say that it was in this period that much of the ground was cleared on which numismatic studies and their application to historiography flourished in the present century. Torrens published an article on "The Greek-legends on the

coins of the Indo-Scythian princes of Cabul" in the *Numismatic Chronicle*, 1952-1953 and Vaux published his article on some rare Bactrian coins in the *Numismatic Chronicle*, 1853-1854. E. Thomas brought out his catalogue of Bactrian coins in 1857. In 1858 he edited Prinsep's *Essays on Indian Antiquities* in two volumes. This shows how even in a very short period the contributions of James Prinsep were in great demand. In this period chance discoveries and travelling antiquarians gave way to planned discoveries and planned explorations of academic archaeologists. Distinctions between fake and genuine were gradually being made. Cunningham wrote articles on forgeries of coins which warned the amateur and the experts alike. A scientific basis was established and planned thinking led to classification, analysis and survey. It was recognized that the numismatic evidence did not require the internal classification alone. But it had also to be contextualised. Cunningham's *Archaeological Survey Reports* (1862-1884) in twenty-three volumes provided a comprehensive survey of archaeological material and its geographical distribution. The material object thus got their context. Individuals and institutions by this time had made good collections; and the examination and cataloguing of these collections started in earnest. The major contributions of Cunningham, namely, *Coins of Alexander's Successors in the East* (1873), *Coins of Ancient India* (1891), *Coins of Indo-Scythians* (1892), *Coins of the Medieval India* (1894), and *Later Indo Scythians* (1895) provided for the first time a comprehensive, up-to-date and scholarly account of the entire coin series of pre-Muhammadan India. The remarkable thing about them is that their value still remains undiminished. Even though some of his theories may be out-of-date now, the observations of Cunningham in fact serve as source material for early Indian numismatics.

The last twenty years of the nineteenth century also saw the publications of other 'basic' catalogues of important collections of coins, some of which are still of great help. Rodgers did the pioneer cataloguing of the Lahore, Delhi and Calcutta museums. Unfortunately he could not manage to illustrate any of the coins he catalogued. But the lists made by Rodgers in fact were the basis of later catalogues of these museums. Rodgers had a passion for coin-collecting and he was a source of inspiration to many of his younger contemporaries. A very useful book *Coin-Collecting in Northern India* was published by him in 1894. In U. K. the *British Museum Catalogue of Coins of the Greek and Scythic Kings of Bactria and India* was published in London in 1886. In

Facsimile of A. Cunningham's Letter to E. J. Rapson

Crowley Mansion
Gloucester Road
20th Sept. 1891

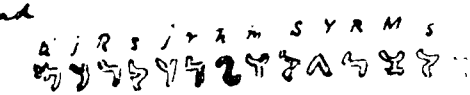
My dear Rapson

Pray accept my best thanks for all the trouble you have so kindly taken about my Indian Coin Book — The Plates seem to be all right, with the single exception that you have noted — of Pushumitra —

I have sent the second set of proofs direct to Virtue & Co — along with a short preface, title page and Table of Contents —

Many thanks for the cast of the horse coin — The legend puzzles me

I read



Harmaeus does not take the title of King of Kings and I cannot make out his name on this coin The letter Y which I read as M is the same as the first letter of Maharaja — but with a stroke below as in Satavahana Y — I shall be very much

obliged for an electrotype of the horse side of this coin —

I am still working at the White Huns. and am now beginning to see some sort of light amidst the darkness

I see that Dr Bühler has adopted Kharoshṭri as the name of the Gandharan alphabet — But he quites as translation —

If khar = χρ/υσος

then Kharoshṭra = Zarathushtra

= Zoroaster

Which is not impossible, as sv = kh

swarna = χρυσος

Yours

very sincerely Yours

Cunningham

Germany Von Sallet published his valuable work *Die Nachfolger Alexanders des Grossen in Bactrien und Indien* in 1879.

The foundation of the studies on the coins of the Deccan and South India was also laid during this period. It was the collection and study of Pandit Bhagawanlal Indraji of the Śaka-Sātavāhana coins which cleared the ground for Rapson. *Coins of Southern India* by W. Elliot, published in 1886, also provided a basis for further work. Tufnell's book *Hints to Coin-Collections in Southern India* published in 1889 provided a counterpart of Rodgers book of similar nature for northern India.

In 1897, Rapson published that remarkable little book called *Indian Coins* which is still one of the best guides and a book of general but authentic survey used by numismatists and historians. This is in fact the first book which gives a short summary of the whole range of ancient Indian coinage with well chosen illustrations.

III. 1900-1940 : The Numismatic Supplements to *JASB* and the Foundation of the Numismatic Society of India

Prinsep dominated the first period under our survey, Cunningham the second, but it is difficult to say who dominated this third phase. Rapson, who was a carry-over from the last century and whose *Indian Coins* had already appeared in 1897, no doubt played a most constructive role throughout this period. But the contributions of Vincent Smith, George Macdonald, John Allan and R. B. Whitehead cannot be underestimated. The two other events of this period however gave the greatest fillip to the numismatic studies in India ; one, the publication of *Numismatic Supplements* in the *JASB* from the year 1904 and, two, the foundation of the Numismatic Society of India in 1910.

This period thus on the one hand witnessed increased but organised activities towards collecting and classifying numismatic data and on the other the constructive utilisation of numismatic material for the historical writing on ancient India. Numismatics also entered the University. D.R. Bhandarkar delivered his Carmichael lectures on Indian Numismatics in 1921. Smith, Rapson and other historians utilised numismatic material to great advantage in their histories.

It is interesting to note George Macdonald saying in 1903, "If there is to be further progress there must be a change of

tactics. Attention must be concentrated on well defined groups which should be subjected to as close a scrutiny as possible. If this is done systematically, there can be little doubt but that the tangled skein will be unravelled". Macdonald published his book *Coin Types* in 1906. Though his statement and his book were concerned with Greek numismatics, they seem to have influenced the course of Indian numismatic studies, no doubt on account of the Indo-Greek coinage.

Rapson's statement is also relevant: "Comparatively few of the very numerous series of Indian coins have yet been systematically collected. The attractions of the Graeco-Indian class have apparently diverted the attention of most collectors from a study of the purely native ancient and medieval coinages. But there can be no doubt of the great historical importance of these latter. The future progress which scholars will be able to make in this work depends principally on the amount of new material with which they are supplied by those who have opportunity of making discoveries and observations in India."

In England, *The British Museum Catalogue of the Coins of the Andhras, Western Kshatrapas etc.*, was brought out by Rapson in 1908, and of the coins of the Guptas by Allan in 1914. The catalogue of ancient Indian coins in the Indian Museum, Calacutta was brought out by Smith in 1906 and the *Punjab Museum Catalogue*, vol. I, dealing in the coins of the early foreign dynasties, was published by Whitehead in 1914.

On the one hand systematic cataloguing of all useful collection of major groups of Indian coinages—except the Hindu Medieval and South Indian dynasties—started, and on the other, through the learned journals, systematic treatment of smaller groups and of stray coins appeared. In 1904 the *Numismatic Supplement* to the *JASB* was started, "primarily in the hope that coin collectors in India may find it convenient to chronicle in its pages notices of unpublished or rare coins which they may obtain from time to time." It was felt that "it is in the help that such notices afford to those engaged on the larger work of tabulating the numismatic records of specific periods and dynasties that this supplement should be found useful, if coin collectors and those interested in philological and antiquarian matters will but commit their observations to writing, to use the words of Sir William Jones..." This call and arrangement enabled the student and collectors of coins to take a big leap towards publication of their discoveries and results of their researches.

In 1910, the Numismatic Society of India was founded at Allahabad and thus a great step towards organised thinking was taken. It not only provided a forum to students and collectors of coins to discuss their problems but it also helped in the coordination and publication of the results of their studies. Nelson Wright, G. P. Taylor, Richard Burn and R. B. Whitehead took the leading part in the organisation of the Society.

It became clear from Smith's *Early History of India* that analysis of the primary sources was essential for historical writing ; in fact, all text-books on Indian history devoted one chapter at the outset for the discussion of the sources and their relative value. And the new numismatic material came in such abundance that some historians became eager, often impatient, to deduce results. In the universities of India the need of independent and special study of ancient Indian history and archaeology was recognized. Numismatics became a subject of study in Calcutta in 1918, and a few years after in Banaras. Some of the universities, like Bombay, made numismatics with epigraphy optional subjects of study in the Sanskrit course. Numismatics thus became an attraction to the student, collector and the historian. D. R. Bhandarkar and R. D. Banerji did much to popularise the subject. The former published his *Carmichael Lectures on Ancient Indian Numismatics* in 1921, and about the same time the latter brought out a remarkably good book in Bengali called *Prāchīna Mudrā* which was translated later into Hindi.

The *Cambridge History of India,* volume I, which was published in 1922, included two chapters, XVII and XXII, by Macdonald and Rapson respectively, which were based mainly on numismatic material, and they provided what may easily be called a model of the combination of numismatic and historical scholarship.

We may now turn to the researches in the different periods and branches of Indian numismatics during this period.

Theobald paid special attention to the symbols found on the punch-marked coins and tried to interpret and describe them. Spooner in his description of these coins found from the vicinity of Taxila noticed for the first time the grouping arrangement of the various symbols on them, though of course his theory of their Buddhist character could not stand the test. R. D. Banerji in his learned description of these coins presented to the Asiatic Society of Bengal by the

Amir of Kabul proved that the punch-marked coins were not only the earliest coins of India but were also current at the same time in Afghanistan (vide *Num. Supplement* No. XIII). He further noticed some new symbols and a few Brahmi and Kharoshthi letters of the Maurya and Kushan periods. V. A. Smith in vol. I of the *Catalogue of Coins in the Indian Museum, Calcutta* tried to assign different eras to these coins. This was followed by Walsh in 1919 who elaborately described the hoards of this class of coins from Patna and Bhagalpur in the Journal of Behar and Orissa Research Society and contributed substantially to the knowledge of the different types. K. P. Jayaswal made very commendable efforts to identify some of the symbols on these coins with the Royal symbols of the rulers of the Maurya and Śunga period. Last of all, mention must be made of a very systematic and thorough study of the symbols on the silver punch-marked coins with reference to various hoards found in the different states of India made by Durga Prasad. The merit of his studies lies in the accurate drawings of these symbols, illustrated in the numerous plates, personally prepared by him.

The coinage of the Bactrian Greeks which attracted attention of scholars and collectors in the earlier periods of Indian Numismatography continued to hold its attraction in this period too. Apart from the treatment given to this series by Whitehead in the Lahore Museum catalogue and Smith in the Indian Museum catalogue of coins, some articles were contributed by the former in the *Numismatic Supplement* and *Numismatic Chronicle*. His notes on the Indo-Greek Numismatics published in 1923 is indeed a very valuable contribution. In fact in this article, Whitehead discusses many points arising from the discovery of new hoards, the geographical distribution of coins, types and monographs which he omitted to discuss in his introduction to the Lahore Museum catalogue of coins. The excavations at Taxila during this period conducted by John Marshall brought to light a very large number of coins of the Indo-Greeks and later rulers of north western India, including the issues of several previously unknown rulers. The Taxila excavation also enabled the numismatists to establish the sequence of the Indo-Greek and the Indo-Scythian kings as well as the priority of the Kadphises group of kings over the Kanishka group. Aurel Stein described various deities of the Kushana coins for the first time (*Indian Antiquary*, vol. XVII). Thanawala wrote on the Zoroastrian deity Ardoshr or Ardvishur on Indo-Scythian coins. (*Numismatic Supplement*, XXV).

The most important contribution to the coins of the Kshatrapas in this period is the Sarvania hoard of coins, which gave several new dates to previously known Kshatrapa kings and at least one new sovereign. Rapson's successful attempt to assign an interesting copper coin to a Kshatrapa king Bhumaka, who preceded Nahapāna and his comparison with the bow and arrow type of Spalirises and Azes coin-type makes a definite advance.

Of the coins of the Gupta sovereigns, besides the valuable catalogue of the British Museum by Allan and the writing of V. A. Smith in his catalogue of the Indian Museum as well as his article in *JASB*, several other notices were made. Attempts were made by Allan and Hiranand Sastri at deciphering the legend on Aśvamedha coins with the help of two varieties known so far but the last word has yet to be said from some more specimens that may be obtained in future. One of couch type, the other of archer type with Laxmi seated on lotus and the third of copper archer type of Chandragupta II, were published. One peacock type with the legend *Mahendra-kumārah* and two new varieties of lion-slayer type of Kumāragupta were brought to light by Hiranand Sastri and Pannalal. The latter scholar has also proved that the goddess seated on the lion is Pārvati and not Lakshmi. N.K. Bhattasali assigned two uncertain coins in the cabinet of Indian Museum to the ruler Samachara and O. C. Ganguli showed that Vainyagupta was the name of the ruler who issued the coins under the appellation of Avādasāditya. R. B. Prayag Dayal has described among other coins of Kumāragupta, one thin gold token resembling the copper coin of Kumāragupta with Garuda in the upper half and the name of the king Śri Mahendrāditya in the lower half. Prof. A. S. Altekar's paper on the Chandragupta-Kumāradevī type (*NS*, XLVII), refuting Allans theory that it was issued by Samudragupta, was most significant contribution to Gupta numismatics.

A big hoard of coins of the Audumbaras, one of the north-western tribes, found in the Kangra district of the Punjab, was examined and described by R. D. Banerji. The coins had legends in Kharoshthi and Brahmi script, the latter of the first century B. C. type. Banerji discovered two new names on the coins Śivadāsa and Rudradāsa over and above Dhāraghosa who was known to Cunningham.

Taylor published an exhaustive article on the successive degradations of Indo-Sassanian coins right upto the thick and dumpy pieces popularly known as

Gadhaiya coins which were current in Gujarat and Malava for a considerable period. Whitehead described a hoard of White Hun coins found in Kanishka's chaitya at Shahji-ki-dheri, near Peshawar, and supplemented the same by describing few coins of Kidara and Mihiragula type from his own collection.

Nelson Wright has noticed eight coins of Gangeyadeva found at Isurpur in Saugar District which unlike the thin and broad coins known so far were thick and only 1/2 inch in diameter. Burn suggested that the coins may be a posthumous issue by Gangeyadeva's son Karṇa, who was a great conqueror. Rapson brought to our notice a big hoard of Bull and Horseman type coins found at Lansdowne in the Garhwal district of U. P. Except for a few coins of Sallakshanapala and Anangpala of the Tomara dynasty the major portion of the hoard refers to Chahadadeva of Narwar. Two types of coins of this ruler are known and this find is not of the usual Narwar type which bear dates from 1233 to 1254. These coins represent Chahadadeva as an independent sovereign. The question has been further discussed with the help of contemporary inscriptions by R. D. Banerji when he described a big hoard of about eight hundred coins from Gwalior State. That find has the crude figure of Chauhan horseman on one side and the three lined inscription bearing the names of the ruler on the other side. Coins of Chahadadeva, Asalladeva and Gopaladeva are almcst equal in number while two hundred and fifty were useless being worn out. A find of 48 silver coins from Panwar in the Rawal State was assigned by Banerji to Madanvarman of the Chandella dynasty. Though gold coins of both the larger and smaller varieites are known to exist in several museums, silver issues of the dynasty are very rare, only one coin having been described by Cunningham. In that find there were 8 of the larger type and 40 of the smaller variety. The legend is exactly the same as on gold ones.

Banerji corrected the assignment of the gold coins of Mahipāla which were previously assigned to Mahipāla of the Tomara dynasty of Delhi. The coins of this dynasty are of the Bull and Horseman type, while those gold coins which follow the arrangement of coinage of the Chedi king Gangeyadeva must be assigned to Mahipala I of the Gurjara Pratihara dynasty of Mahodaya. Similarly a find of gold coins from M. P. reported to be of Gangeyadeva were attributed by him to the Parmāra chief Udayāditya.

Coins of the Gujarat Chalukyas popularly known as Solankis were noticed for the first time by Burn, who assigned two gold coins found at Pandwaha in Jhansi District of U. P. to Siddharaja Jayasinha of Anhilwada in Gujarat. Dikshit assigned the coins found by him at the Paharpur excavations to the early Pāla rulers.

It is interesting to note that in the first half of the period under review, most of the contributions made in the pages of the *Numismatic Supplement* were on the Muhammadan coinage and later series and were contributed mostly by European numismatists. In the latter half, however, considerable attention was given to pre-Muhammadan coinage.

IV. Numismatic Discoveries and Researches during 1940-1950

The numismatic material discovered and published during the years 1940-50 bearing on India is considerably interesting, important and diverse. Most of it was published in the *Journal of the Numismatic Society of India* or under the auspices of the Numismatic Society of India.

Owing to the difficulties created by the Second World War, very few independent books on Numismatics were published during this decade. Nor were any museum catalogues brought out. The most important among these is undoubtedly Dr. Bubal Sahani's memoir on *The Technique of Casting Coins in Ancient India*, published by the Numismatic Society of India in 1945. It is a very valuable, exhaustive and authoritative work on the subject it deals with. Dr. Sahani, though a palæobotanist, was led to the study of this subject by the discovery of a large number of Yaudheya moulds, which he accidentally made at Rohtak in the south-east Punjab. He became so much interested in the subject that he later made a systematic study of the moulds of coins found at Nalanda, Sunet, Banaras, Taxila, Mathura, Sanchi, Kondapur, Kadkal and Eran in order to prepare a scientific, authoritative and exhaustive treatise on the technique of casting coins in ancient India. He further studied the technique of the ancient Romans and Chinese also in this respect and has given us a monograph, which will long remain indispensable to all the students of Ancient Indian Numismatics. The monograph is illustrated by seven plates containing 146 figures, drawings and illustrations.

A Hoard of Silver Punch-marked Coins from Purnea, was published as its Memoir No. 62 by the Archæological

Department in 1940. In this painstaking work, its writer, Mr. Bhattacharya, gives an exhaustive account of the biggest hoard of punch-marked coins yet to be published. The work is a valuable contribution to the knowledge of its subject.

In *Numismatic Parallels in Kālidāsa*, C. Sivaramamurti opens a new line of study of literature from the numismatic point of view. The booklet illustrates 28 numismatic motifs, which can be seen referred to or described by Kālidāsa.

In *Coins of Marwar*, Pandit B.N. Reu gives an interesting account of the coinage of Marwar from c. 400 B. C. to 1945. It is interesting for the study of the local coinage.

In *Bhāratiya Sikke*, Mr. Upadhaya gives a succinct account of Indian coinage from early to the modern times. The book is for the general reader and not for the expert, and meets a long felt need in Hindi literature.

Reviewing *Bibliography on Indian Coins*, part I, compiled by Mr. C. R. Singhal and edited by Prof. A. S. Altekar, *The Numismatic Literature*, (July 1951), published by the American Numismatic Society, says, "Mr. Singhal has rendered an invaluable service to the students of Indian Numismatics and merits a high degree of commendation for the singular industry he has brought to the task...With every bibliographical entry is given a critical summary of the article referred to, and it is this particular feature which renders the work so highly useful. An impressive amount of minute study has been devoted to Indian coins during the last century, but much of this research published in the form of papers in various journals remains unutilised and forgotten...Thus the assemblage in one handy volume of the references to all or most of the articles has been a desideratum of long standing. Mr. Singhal has immensely enhanced the value of his work by the inclusion of these critical summaries alluded to above." It may be stated without exaggeration that the research workers in no other branch of Indian Archæology are so well posted about the work done in the past as those in numismatics. The bibliography divides the articles topic-wise and in each topic they are arranged alphabetically with reference to the names of the authors.

Relative prices of coins and metals in ancient India are but imperfectly known. Prof. A. S. Altekar has thrown some light on this obscure subject in his paper dealing with

it (*JNSI*, II. 1). Prof. Mirashi has shown that the term *Kumārvgadyāṇaka*, occuring in Gahadavala records, does not refer to a coin denomination, but denotes presents given by the subject to the king on the occasion of the birth of a son (ibid., VII-29).

Several new hoards of punch-marked coins were either discovered or published during this period. A critical review of the *Patraha (Purnea District) Hoard of the Punch-marked Coins*, was published by Mr. Walsh in which he made a comparative study of the several hoards of punch-marked coins available for study till 1941 (ibid, IV. 81). Five hoards of punch-marked coins were discovered in the excavations at Rairh in Jaipur State. They have been briefly described by Mr. Puri in his *Excavations at Rairh*. All told, these hoards contained 3175 coins, more than 75 % of which belonged to the Mauryan period. A hoard of 960 punch-marked coins was discoverd at Bahal in East Khandesh district of the Bombay State, which has been very briefly noticed by Mr. Chakravarti in a short paper. (*JBBRAS, NS.*, vol. XX, 83-87. For criticism of this paper, see Kosambi and Gupta in *JNSI*. VIII, 63 and 119). The coins of this hoard belonged both to the Mauryan and the pre-Mauryan periods. One of them has a unique symbol of a lady carrying a baby in arms (*JNSI*, VIII. 63). The U. P. hoard of punch-marked coins of 1916 has been adequately described by Walsh (ibid., III. 1). It consisted of 105 punch-marked coins, bearing the usual five symbols ; 64 of the coins are pre-Mauryan and the rest Mauryan. Small hoards of punch-marked coins were recovered in Azamgarh, Hardoi and Kasarwad and P. L. Gupta, Bajpeyi and Diskalkar published short notes upon them (ibid., VIII. 34 ; X. 46 ; X. 146). P. L. Gupta contributed two papers giving a critical review of Mr. Walsh's Memoir on the two hoards of punch-marked coins found at Taxila (ibid., XI. 114 ; XII. 136). These papers give a comparative study of the subject and are valuable for the study of punch-marked coins.

A small hoard of punch-marked coins was discovered at Kausambi in 1937-38. It has been fully described and illustrated by Dr. Dasgupta (Ibid, XII. 74). The importance of this hoard lies in the fact that it consists of both the Mauryan and pre-Mauryan types. The reference to symbols in the plate, as given in the papers, are in many cases inaccurate. The reference to the corresponding coins in the *BMC* are generally correct.

Several discoveries of new types of punch-marked coins were made during this period. The Bijnor hoard contained new types of half *kārshāpaṇa* having Elephant or Bull, or Fish on one side (*JNSI*, I. 1). The Paila hoard of 1245 punch-marked coins, fully described with illustrations by Walsh, discloses a new type in the punch-marked series having only four symbols on the obverse, and weighing only 42 grains. The Sun and the six-armed symbol are both conspicuously absent on this new type (ibid., II. 15). Mr. S. Sah published a new variety of Kosala punch-marked coins, which are thin, large and cup-shaped, blank on one side and have a large number of symbols on the other (ibid., III. 51). These coins weigh about 80 grains; they may thus be double *kārshāpaṇas* of the 42 grains standard, which is disclosed by the Paila hoard, or *Adhyardhakārshāpaṇa* (1½ *kārshāpaṇa*) pieces of the usual 56 grains standard. The hoard of 1138 punch-marked coins found at Bodinaikkanur near Madura in Madras State has yet to be studied scientifically. From a preliminary note about it published by Mr. Aravamuthan, it appears that the sample coins examined from it had five symbols on the obverse and one peculiar symbol on the reverse, consisting of the letter X capped by the inverted letter V. The presence of five symbols on half *kārshāpaṇas*, if correctly reported, would be a new feature; for usually they have only one or two symbols. These coins have been assigned to the 3rd century A. D. by Mr. Aravamuthan (ibid., VI. I.) Prof. Altekar published quite a new type of silver punch-marked coins, very large in size and thin in fabric, but not cup-shaped. They were current in Kośala in pre-Mauryan period but do not bear symbols like those on the coins published by Durga Prasad (ibid., IX. 1).

Dr. Agrawala has shown that *kārshāpaṇas* or punch-marked coins were also known as *prati* during two or three centuries preceding and following the Christian era (ibid., VII. 32). He has also illustrated tiny silver *māshakas* weighing about 3·5 grains (ibid., VIII. 41). Mr. V. P. Rode published a punch-marked coin showing the symbol of owl for the first time (ibid., X. 75). Messrs Altekar, Agrawal and Gupta have shown that many of the symbols occurring on the copper band found at Patna are identical with those on punch-marked coins (ibid., VI. 5; IX 88).

Considerable progress was made in the last decade in the classification of punch-marked coins and the analysis of hoards. It has not yet become possible to assign majority

of types to definite dynasties or localities. Prof. D. D. Koshambi has made an effort to determine the chronology of types with the help of the relative loss of weight shown by them. He attributes some of the types to some kings beginning with Ajātaśatru and ending with Śatadharma Maurya. (*New Indian Artiquary*, vol. IV. 1-35 ; 49-76).

The problem of the interpretation of the symbols, however, remains still unsolved. Swami Sankarananda attempted its solution with the help of the data supplied by the Tantric literature. He gives the alphabetical values of several symbols and reads with their help the so-called legends on the punch-marked coins published by Allan in Pl. VIII. The readings however, hardly carry much conviction (ibid, XII. 11).

Considerable new light has been thrown upon the history and numismatics of Madhyadeśa during the post-Mauryan period by several discoveries. Most important among these are from the coins in the coin cabinet of Allahabad Municipal Museum, which enabled Dr. Altekar to bring to light a number of ancient kings of Kauśāmbī, Ayodhyā and Mathurā (ibid., IV. 1 ; 133). Among these Vavaghosha seems to be the earliest of the kings of Kauśāmbī ; his coin legend is in almost Aśokan characters. Only a few kings of Kauśambī were so far known from coins. Coins of Poṭhamitra, Rādhamitra, Suramitra, Prajāpatimitra, Rājamitra, Rajanimitra, Śatamitra, and Sarpamitra were thus new discoveries. It is difficult to determine the relative or absolute date of these rulers, but there can be no doubt that they ruled between 150 B. C. and 50 A. D. They do not figure in the Puranic list of Śuṅga and Kaṇva kings. These coins therefore make it fairly clear that the Śuṅga and Kaṇva sway did not extend over Kauśāmbī and Allahabad and was probably confined to Magadha some years after the death of Pushyamitra. An independent dynasty was ruling at Kauśāmbī, i. e. ancient Vatsa, which was issuing coins in copper, usually having Bull (*vatsa*) as one of its symbols on the reverse. The coin attributed to Śugarāja or Śuṅgarāja is now shown to be a coin of Agarāja (ibid., IV. 137). There is thus no evidence to show that the founder of Śuṅga dynasty had issued any coins.

New coins have thrown further light on the history of Kauśāmbī during the period 150-350 A. D. also. It was known that a dynasty described as Magha by the Purāṇas was ruling over Kauśāmbī during this period and four of its rulers, Bhadramagha, Śivamagha, Vaiśravaṇa and

Bhīmavarman were known from their coins. We have now got coins of Satamagha, Vijayamagha, Puramagha and Yagamagha, obviously belonging to the same series (ibid., V. 19). The coin of Bhīmasena published by Mr. Singh Roy also belongs to the same dynasty. It is difficult to say whether Bhīmasena of the new coin is identical with Bhīmavarman known earlier. Whether Pushvaśrī, whose coins were published by A. S. Altekar, belonged to the same series we do not know; but it is very probable that he was ruling at Kauśāmbī by the middle of the 4th century (ibid., VI. 136). The hoard of 285 Magha coins discovered in Fatehpur district and described by Dr. Moti Chand does not contain the names of any new rulers. But its findspot shows that the Magha kingdom included the district of Fatehpur as well. Only 179 coins of the hoard were legible and out of these 101 were of Śivamagha, 64 of Vaiśravaṇa, 9 of Bhīmavarman and 2 of Bhadramagha. This analysis may perhaps show that Śivamagha and Vaiśravaṇa were among the powerful rulers of the dynasty (ibid., II. 95). King Rudra, whose copper coin was published by Mr. Nagar, was very probably king Rudrasena overthrown by Samudragupta. He also published a coin with the legend *kosaḥi*, which is the second coin of its type (ibid., XI. 12).

In the Pañchāla series five new kings, Vasusena, Varuṇamitra, Tagapāl, Damagupta, and Prajāpatimṭtra were discovered (ibid., II. 115; III. 80; V. 17.) The coin of the last mentioned king is interesting inasmuch as it contains only the first of the usual three Pañchāla symbols, the remaining two being apparently displaced to accommodate the first two letters of the name of the king, which being rather lengthy, could not be fully engraved in the single line below. Only copper Pañchāla coins were known so far, but Singh Roy also published a silver coin of Vishṇumitra (ibid., V. 15).

King or republic Madavika of c. 200 B. C. was brought to light by Dr. Altekar. As the findspot of the coin is not known, it is not possible to locate the territory of Madavika (ibid., IV. 14).

In the Ayodhyā series a new king named Jyeshṭhadatta came to light from his coin published by Dr. Altekar (ibid., VIII. 14). The identity of Yugasena, whose coin was published by Dr. Agrawala, is not yet known; probably he was ruling in the U. P. in the first century B. C. (ibid., V. 19).

Vārāṇasī has been famous in Indian history since early times. Mr. Singh Roy published for the first time two coins bearing the legend Bāraṇasi in characters of c. 150 B. C. (ibid., XII. 134).

The hoard of 164 Yaudheya coins discovered in Dehra Dun district and described by Rai Bahadur Prayag Dayal discloses several new features in devices. Ass and leopard are seen on the reverse, as also Devasenā, the wife of Skanda (ibid., II. 109). Senāpati Vachchhaghosha, whose coins are found at Rairh was most probably a general of the Yaudheya or Arjunāyana republic (*Excavations at Rairh*, Pl. XXXVI). The clay moulds of the Yaudheya coins have been exhaustively dealt with by Dr. Sahani in his Memoir on the *Technique of Casting Coins in Ancient India*, to which we have referred already. So far no coin of the Yaudheyas, bearing the word *tri* after the legend, had been illustrated ; Dr. Altekar published two such coins from the Prince of Wales Museum, Bombay (*JNSI*, XI. 15)

Some further light has been thrown on the obscure history of Mathurā by a few coins published in the decade. A coin belonging to the 2nd century was published by Mr. Nagar (ibid., VII. 32). Mr. Sohoni suggested that king Uttamadatta of Mathurā belonged to the Uttamabhadras who had sided with Nahapāṇa (ibid., VII. 27). A king named Alāsasata (?) came to light, who had some victories to his credit, probably over the Śakas (ibid., VI. 25).

Several theories had been started by Dr. Jayaswal about the identity of the Nāgas and the part they had played in history during c. 150 to 350 A.D. But Dr. Altekar who published the coins of Bhavanāga has shown that he belonged to the Nāga family of Padmāvatī or Narwar and is to be identified with the maternal grand father of the Vākāṭaka ruler Rudrasena I (ibid., V. 21). The Nāga rulers who claim to have obtained the water of the holy Ganges by their conquest were thus the rulers of Padmāvatī, and not of Champā or Kāntīpurī, as was suggested by Dr. Jayaswal. Dr. Altekar has further shown after a detailed and exhaustive examination that king Nava of the coins was not a Nāga ruler, that we have no coins on which we can read either Chharajanāga or Barhiṇanāga or Hayanāga, and that the coins of the Vākāṭaka rulers Rudrasena and Pravarsena do not exist. The numismatic evidence which was supposed to support the theory of a big Nāga and Vākāṭaka empire is thus shown to be non-existing (ibid., V. 111).

We were unaware of any inscribed coins from C. P. belonging to the pre-Christian period ; the coin of Dimabhāga published by Prof. Mirashi is therefore very interesting (ibid., VI. 9).

In the sphere of the Sātavāhana coinage, we have to record several important discoveries made by Prof. Mirashi. Three coins of king Sātavāhana were published ; very probably he was the founder or a very early ruler of the dynasty (*JNSI*, VI. 1 ; XI, 5 ; *Bulletin of the Deccan College Research Institute* VI. 141-2). A coin of Sātakarṇi was published ; he was very probably the grand-son of the founder, who was the husband of queen Nayanikā of the Nanaghat inscription (ibid., VIII. 11). Sembaka, whose coin is published for the first time, has been suggested to be a predecessor of Sātavāhana, the founder of the dynasty ; but more probably he was a Sātavāhana feudatory ruling in the 1st century A. D. (ibid., VII. 94). The Tarhalā hoard of the Sātavāhana coins, found at Tarhalā in Akola district in 1939 and published by V. V. Mirashi, is one of the biggest hoard of the Sātavāhana coins ever discovered. It consisted of 1525 coins representing 11 different kings. The earliest king represented in the hoard is Gautamīputra Sātakarṇi, the conqueror of Nahapāna. Though the earliest king, his coins are most numerous ; they are 573 in a hoard of 1525. This shows that he was the most powerful and prosperous of the Sātavāhana rulers. Yajña-Śrī-Sātakarṇi stands second in the hoard with 248 coins to his credit and Vāśishṭhīputra Pulumāvi third with 174 coins in his name. These kings were the powerful ones among the successors of Gautamīputra Sātakarṇi, and it is but natural that their coins should be numerous. The hoard discloses the existence of three new kings, Kumbha Sātakarṇi, Karṇa Sātakarṇi, and Śaka Sātakarṇi, who are altogether unknown from any epigraphical or literary sources (ibid., II. 83.)

A silver coin of Vāsiṣṭhīputra Sātakarṇi was published by Altekar who thought that he was the son-in-law of Rudradāman (ibid., XI. 59). Mr. Gadre published several copper coins of the Sātavāhanas found in Gujarat ; they for the first time supplied evidence to support the claim of the conquest of that province by that dynasty. The coins were issued by Gautamīputra (ibid, XII. 28). Sātavāhana coins were not found till then in the Jubbulpore area. Dr. Katare published a coin of king Sātakarṇi and another of Gautamīputra Yajñaśrī Sātakarṇi found in that area (ibid., XII. 94 ; 126).

That the Sātavāhanas had some Śaka feudatories under them, who were issuing coins, is shown by the coins of Śaka

Māna published by Prof. Mirashi. They had the title of Mahāsenāpati. They were ruling in South Hyderabad (ibid., X. 1; XII. 91). Mirashi brought to light another Sātavāhana feudatory named Yaśaścharakāma (?) (ibid., XI. 86).

In his Catalogue, Rapson had doubtfully attributed a coin of Aja(data) to the Sātavāhana dynasty. Altekar published two coins of the same type, doubting the attribution and saying that Ajadatta was probably a king of Central India (ibid., IV. 23).

As far as the early foreign invaders of India are concerned, no important discoveries were reported during the period under review. A hoard of about one thousand Indo-Bactrian hemidrachms was discovered in 1942 at Bajaur in the tribal territory in the Kunar valley, mostly consisting of the common types of Menander, Apollodotus, Antimachus Nikephorus and Zoilus. Only a few coins of his hoard could be recovered and examined and Major General H. L. Haughton published a note on them (ibid., IV. 146). Another hoard of Indo-Greek coins was discovered at Shaikhano Dheri near Charasadda. Only about 130 coins of the hoard could be secured for examination and they were briefly noticed by Major General Haughton. The rulers represented in the hoard are Menander, Strato with Agathokleia, Amyntas, Diomedes, Philoxenos, Hermaeus and Hermaeus with Kalliope. Major General Haughton and Altekar published notes upon some rare Indo-Bactrian coins; among them was a coin of Hermaeus having a monogram usually appearing on the coins of Vonones and his associates, suggesting that Hermaeus and Vonones were not far removed from each other in time (*JNSI*, IV. 146, VIII. 51; IX. 16). Altekar published five coins of Hermaeus of the joint type, where, he pointed, the bust does not bear any resemblance at all to that of that ruler. These pieces, according to him, show that the so-called joint coinage of Hermaeus and Kujula Kadphises was not a joint coinage in the real sense of the term; the name and crude bust of Hermaeus were mechanically copied for several decades after his death (ibid., IX. 6).

Dr. Whitehead published a few interesting coins, the most important among which was a copper square piece of Antimachus with thunderbolt on the obverse and a running elephant on the reverse. While publishing these coins, he reviewed some of the theories of Dr. Tarn advanced in his work *The Greeks in Bactria and India*. (*Num. Chr.* 1940. pp. 88-122). Major General H. L. Haughton had a wide experience as a coin collector in the Punjab of about 40 years; he has given us a useful note upon the provenance of the coins of

the Indo-Greek kings (ibid., 1943, pp. 50-59). He also published a catalogue of 22 varieties of the silver coinage of Strato, which is quite exhaustive (ibid., 1948, p. 134). The question of the attribution of the coins of Sophytes was exhaustively discussed by Whitehead, who thought that Sopeithes of Arrian is not identical with the Sophytes of the coins and suggested that the latter was not an Indian ruler, but a satrap, who declared independence on the fall of the Persian empire in c. 325 B. C. (ibid, 1943, pp. 60-72). Dr. J. N. Banerjea examined the above view of Dr. Whitehead and concluded that it had not yet been definitely proved (*JNSI*, VII. 83). Prof. A. K. Narain however feels that the case for Dr. Whitehead's view is very strong (ibid, XI. 93). An uninscribed copper coin, with Bull on one side and a tripod-like symbol on the other, which had been attributed to Apollodotus by Gardner was shown to be a variety of Taxila coinage (ibid., IX. 30).

Dr. Whitehead made a fresh study of the coins of Aspavarman and his relations and showed that he belonged to a line of hinduised Śaka rulers. His father was Indravarman and grand-father Vijayamitra, who is to be identified with Viyakamitra of the Bajaur Steatite casket inscription belonging to the middle of the first century B. C. Saśa was Aspavarman's nephew and probably more powerful than all his predecessors (*Num. Chr.* 1944, pp. 99-104).

The Rajghat excavations on the outskirts of Banaras led to the discovery of a number of seals, some of which have Nike, Pallas, Apollo and Herakles upon them. These seals, published by Mr. Krishnadeva (*JNSI*, III, 73), belong to the 3rd or the 4th century A. D. One is surprised to find these popular Greek deities of Indo-Bactrian coins occuring on private seals of Banaras nearly five hundred years after the disappearance of the Greek rule. Was there a colony of Greek traders at Banaras in the 3rd century, or were the motifs on Indo-Bactrian coins so popular as to be copied in far off Banaras in the 3rd century A. D. ?

Two Roman aurei were found at Chakrabedha in the Bilaspur district of C. P. and Mr. Aravamuthan published a note upon them (ibid., VII. 6).

Analysing the features on the different coins of Jīvadāman, Altekar showed that he must have ruled as a Mahākshatrapa twice and at an interval of at least 15 years (ibid., I. 26). He also suggested that the interregnum in the reign of Rudrasena III may be due

to the rise to power of Bhaṭṭāraka (ibid., VI. 19). Dr. J.N. Banerjea pointed out that the reading of the dates on some Kshatrapa coins was very doubtful (ibid., IX. 78). Altekar also published a coin from the Prince of Wales Museum, issued by a predecessor of Bhūmaka (ibid., XII. 5).

The problem of the attribution of the Sino-Indian coins with Kharoshthi legend, *Maharajasa rajatirajasa mahatasa Guramayasa*, was exhaustively discussed by Dr. F. W. Thomas (*Num. Chr.*, 1914, pp. 83) who thought that they were most probably issued by a local Scythian dynasty ruling in Yarkand at c. 50 A.D.

20 Chinese coins were discovered in Tanjore district in September, 1943, mostly belonging to the 11th and the 13th centuries. They were probably brought by the Chinese sailors, who may have presented them to a local temple. (*Sino-Indian Studies*, vol. I, part I).

Dr. J. N. Banerjea argued that Kujula Kadphises cannot be distinguished from Kujula Kara Kadphises (*JNSI*, IX, 98). Altekar published a gold coin of Huvishka, where a bird is seen perched on the king's hand. He further showed that on *BMC*, Pl. XXVIII. 9 also the king has a bird on his hand and not an ear of corn (ibid., XI. 49). A coin of the same ruler showing the name of the deity Shahrewar divided into two parts was published by Dr. Sankalia (ibid., I. 9).

Usually the Kushāṇa coins are found in gold and copper. Their silver coins are very rare. Mr. Dar published a silver coin, which was issued by Huvishka. Its type and size is of the usual gold currency, having the bust of the king on the obverse and a standing deity on the reverse (ibid., II. 13). But these silver Kushāṇa coins do not appear to have been carefully examined in the original.

Four gold coins of the later Kushāṇa ruler Sita were found in the Sheikhupura district of the Punjab. Mr. Paruck contended that these coins have got a marginal Pahalavi legend as well. If this were the case, these coins would suggest the extension of Sassanian suzerainty over Western Punjab. Dr. Unwala, however, felt that the marginal legend is in Greco-Kushāṇa characters and not in Pahlavi (ibid., VI. 52).

A unique gold coin of king Dharmadamadhara (?) was found at Śśupalgarh in 1948. It shows the standing king in the Kushāṇa fashion on one side and the Roman bust on the other (ibid., XII. 1).

The discovery of a hoard of 1821 gold Gupta coins at a village near Bayana in Bharatpur State was the most noteworthy event of the decade in Gupta numismatics. The hoard contained several absolutely new types. Among these may be mentioned the Chakravikrama type of Chandragupta II, Chhatra, Elephant-rider-lion-slayer, Rhinoceros-slayer, Lyrist and King and Queen types of Kumāragupta I and Chhattra type of Kramāditya. There were several new varieties of the existing types, e. g., Bare horse type Aśvamedha coins of Kumāragupta I, Garuḍadhvaja type of Kācha, etc. It was shown by Dr. Altekar that the so-called Pratāpa type of Kumāragupta should be described as the Apratigha type, since the legend on the reverse reads Apratigha and not Śrī Pratāpa. Some of the rare and unique coins of this hoard were published by Altekar (ibid., X. 95).

Standard type of Chandragupta II was till then unknown. A coin of this type was published by P. L. Gupta (ibid., IX. 146) Whether it belongs to Chandragupta I or II, it is difficult to state (ibid., XI. 15). A unique half Dināra of Chandragupta II was published by Mr. Acharya. It was of the Archer type (ibid., I. 26).

A hoard of 21 gold Gupta coins was found ar Bamnala in Central India in Indore State in 1940. A note was published on these coins by Mr, Diskalkar (ibid., V. 135). The only unique and interesting coin of the hoard is an Archer Type coin of Samudragupta, having the legend *Śrīvikrama* on the reverse. This legend is usually taken to be exclusively associated with Chandragupta II and its occurrence on this coin of Samudragupta is therefore very surprising. Altekar tried have to explain this legend by assuming that early in the reign of Chandragupta II, an obverse die of Samudragupta's Standard type was by mistake used along with the reverse die of the Archer Type, (Throne reverse), of the new king.

Further specimens of the repousse gold pieces with the legend Mahendrāditya were discovered in a hoard at Khairtal in Madhya Pradesha. These were published by Mr. V. P. Rode. Altekardoubted their attribution to Kumāragupta I; Prof. Mirashi differed from him (ibid., X. 137 ; XI. 109).

The number of papers discussing problems of Gupta Numismatics or publishing minor varieties of old types for the period under review is very large. Prof. J. N. Agrawala argued that the so-called King and Lakshmī type of Skandagupta is really King and Queen type (ibid., VIII. 48). Mr. S. V. Sonhoni suggested that Chandragupta-Kumāradevī type shows

Sassanian inspiration (ibid., V. 37). Prof. Mirashi tried to solve the mystery of the legends on 'Valabhi' coins by comparing the legends on a number of them. (ibid, VI. 10). He thought that they were the issues of Srī-Śarva Bhaṭṭāraka. Altekar suggested that this ruler probably rose to power, during 351-364 A. D. and was responsible for the eclipse of the Kshatrapa power (ibid., VI. 14).

The coins of the Nala dynasty were not known. A hoard of them was discovered in Bastar State and was published by Prof. Mirashi. Varāharāja, Bhavadatta and Arthapati are the kings represented in it.

Dr. J. M. Unwala published a number of papers bearing on Sassanian and Indo-Sassanian coinages. In one of these he discribes the Hephthalite coins with Pahlavi legends deposited in the British Museum (ibid., IV. 37). Noteworthy among the rulers, who issued such coins, are Napki Malka, Śri Yadevi Manaśri, Vasu Vangāra Chandra, Shahi Tigin and Vāsudeva. 45 lead Sassanian coins were discovered in a jug near the city of Atwaz in Persia ; they published by Dr. Unwala, who attributed them to Sapor II (ibid., V. 43).

In his supplementary notes on coins of Tabaristan, Dr. Unwala stated his revised conclusions about the synchronisms of the Caliphs and Arab governors of Tabaristan after examining the coins in several fresh collections (ibid, VI. 37). In his posthumously published paper on Sassanian and Arab Sassanian mint-marks, Mr. Paruck gave his own interpretations of these marks, some of which often dffer from those of his predecessors. The subject is fraught with difficulties owing to the polyphany of the Pahlavi characters but students of the subject will find considerably useful data in this paper for carrying the work further (ibid., VI. 79).

An analysis of the legends on Sassanian seals in the Indian Museum was been given by Dr. Unwala in an interesting paper (ibid , XII. 98). A new specimen of the coins of Lakhaṇa Udayāditya was published by Dr. Altekar (ibid., IX. 14).

Two new hoards of the so-called *Gadhaiya* coins were found, one at Uruli in Poona district, and the other at Piplaj in Ajmer-Marwar. The Uruli hoard, consisting of 421 coins, was the first *Gadhaiya* hoard to be found so far in the south as the Poona district ; it is a pity that it could not be recovered. Mr. Chinmulgund gives in his paper his general impressions about the hoard consisting of 421 coins based upon their examination of two days, during which the

hoard was with him (ibid., VII. 19). The Piplaj hoard consisted of more than 3000 coins and a preliminary note upon it was published by Mr. U. C. Bhattacharya (Ibid, VII. 98). Mr. Diskalkar's discovery of some *Gadhaia* coins with horseman on the reverse is very interesting; for so far only the Fire-alter was known to figure there (ibid., VIII. 66). Two large thin Ephthalite coins of Yabusara (?) were published by Prof. A. K. Narain (ibid., XI. 100). A *Gadhaia* coin with the legend *Śrī-omkāra* was published by Altekar; it was probably issued by the temple authorities of Oṁkāreśvara in the 11th or 12th century (ibid., XI. 58).

Silver coins of the Haihayas of Tummana are very rare. Mr. L. P. Pandeya published a tiny silver coin of this dynasty weighing only 61 grains, which was issued by one of the rulers bearing the name Prithvīdeva (ibid., III. 41). In his paper on the coins of the Kalachuris, Prof. Mirashi sums up our knowledge of the subject with his own observations here and their (ibid., III. 23). 119 gold coins were found at Parimalagiri in Patna State of Orissa, a paper on which was published by Mr. P. C. Rath, who attributed them to Chauhan king Ramadeva ruling in the 13th century (ibid., V. 61). Mr. R. S. Panchamukhi published a paper on some Vijayanagara copper coins (ibid., V. 49). Much attention has not been paid to the copper coins of Vijayanagar and Mr. Panchamukhi's paper will be a valuable help to the students of the subject. Vijayanagara coppper coins bear legends either in Nāgarī or Kannaḍa scripts and the deity Hanuman figures prominently upon them. The coins with the legend *Kīrti* were published in *IMC.* vol. I, p. 257; they were attributed to king Kīrtipāladeva, ruling in the Gaṇḍakī valley in the 12th century by Miss Roma Niyogi (ibid., X. 72). Drammas of Vināyakapāladeva of the Gurjara Pratīhāra dynasty were for the first time published by Dr. V. S. Agrawala (ibid., X. 22). They are very crude in execution and the legend has to be pieced together from several specimens. A hoard of the coins of Pratāpāditya of Kashmir, found at Rajghat near Banaras, was published by Dr. V. S. Agrawala (ibid., X. 31). Dr. Altekar has suggested that the coins of this hoard with the legend *Sri-Pratāpa* should be attributed to Jayāpīḍa, a grandson of Pratāpāditya (ibid, X. 34), who was cooperating in the Madhyadeśa expedition. A half Dramma of the Chandella king Jayavarman was not known so far; it was published by Altekar (ibid., IV. 33). A hoard of 186 Kashmir coins found near Taxila was described by Dr. V. S. Agrawala. They contain no new king or variety (ibid., XI. 65).

It would be no exaggeration to say that throughout this period of ten years, Dr. Altekar was not only the most active contributor to early Indian numismatography but he was in fact the guiding spirit behind the contribution of many others.

In this paper we have deliberately left out a survey of contributions made during 1950-1960. It may suffice, however, to note that the Altekar school continued to influence early Indian numismatography.

A SURVEY OF INDIAN NUMISMATOGRAPHY

(MUHAMMADAN COINAGE)

P. L. GUPTA

The earliest study of the Muhammadan coins of India was made by an anonymous author of a Persian manuscript entitled *Tazkirāt-u-Sakāka*, which was written in the year 1186 A. H. (1772 A.D.) for Nawab Asaf-ud-daulah of Awadh. This treatise is known from a manuscript copy in the Bhārat Kalā Bhavan, the Museum of Art and Archæology of the Banaras Hindu University. The present copy was prepared, most likely from an earlier manuscript, for publication from a printing press at Amritsar; but we do not know if it was ever published. This work gives an idea of the numismatic knowledge then available. It describes the Muslim coinage of India from Subuktgin, the Gazanavid ruler of the Punjab down to the Durrani ruler Ahmad Shah Since not many varieties of each ruler are mentioned there, it seems that the author included only those coins which he had seen himself. At places, there are obvious inaccuracies, yet the account is extremely interesting as it describes many coins, which are still unknown from other sources. Whatever be the real merit of the work, it shows that people had begun to take interest in the collection of coins by that time.

The real coin-collecting, however, started in the beginning of the nineteenth century, when the civil and military officers of India, took keen interest in it. It was in 1833 that, for the first time, a note appeared on Mughal coins along with other Indian coins that were presented to the Asiatic Society of Bengal.[1] Thereafter, in 1841, a paper was published by H. T. Colebrooke on the coins of Bengal Sultans found at Howrah.[2] In 1822, H. H. Wilson described the coronation silver medal of the Nawab of Awadh, Ghāziuddīn Haider along with a brief history of the dynasty.[3] In 1844 a priced list of the Pathan and Mughal coins,

1. *PASB*, 1833, p. 204.
2. *JASB*, X, p. 168.
3. *NC*, V, p. 129.

purchased by the Asiatic Society of Bengal from A. Cunningham, was published.[1] But hardly any of these may be claimed as study in the Indian Muslim numismatics.

It was only in 1846, that a paper was contributed by J. W. Laidlay on the coins of Bengal Sultans. He described and illustrated 24 coins, belonging to twelve rulers, from his own collection and the cabinet of the Asiatic Society of Bengal,[2] and threw considerable light on the history of Bengal Sultans, about whom very little was known.

In 1848, E. Thomas, one of the most distinguished numismatists of the nineteenth century, entered into the field of Indian Muslim numismatics. He began investigation of the coins of two series simultaneously. One related to the kings of Gazna and the other to the Pathan Sultans of Delhi. On the former he published two papers, one in that very year and the other in 1852. The first was based on the specimens in C. Masson's collection[3] and the information was supplemented in the second paper with his studies of the coins in Col. Stacy's collection,[4] where he described the coins belonging to six rulers, Subuktagin, Ismael, Mahmud, Masaud, Madud and Ibrahim and also noticed a coin of Bull and Horseman type with the name of Masaud in Persian. On the coins of the Pathan Sultans of Delhi, Thomas contributed no less than five papers during the years 1846 to 1848,[5] and he supplemented them with another paper in 1852-53.[6] The rapidly increasing accumulation of new and very ample material induced Thomas to revise the entire subject thoroughly, the result of which appeared in a masterly form in 1871 as *The Chronicles of the Pathan Kings of Delhi*. But no sooner than it appeared, new material began to pour in as a result of further researches. Thomas, himself, published a note, almost immediately after the publication of his work and described seven new coins.[7] Thereafter H. Blochmann published five notes between 1870 and 1878 on coins related to Sher Shah, Iltutimish, Mubarak Shah Khilji, Mubarak II, Nasiruddin Mahmud Shah, Muhammad Adil Shah and

1. *PASB*, 1844, p. 505.
2. *JASB*, XV, p. 323.
3. *JRAS*, 1848, p 267.
4. *JASB*, XXI, p. 115.
5. *NC*, IX, p 79 ; X, 43 ; 127 ; 151.
6. *NC*, XV, p. 121.
7. *PASB*, 1872, P. 199.

Firoz Shah II.[1] In 1871, E. C. Bayley described a rare coin of Firoz Shah Zafar;[2] In 1873, he made known the gold coin of the usurper Nasiruddin Khusru.[3] In 1872, Sardar Attar Singh published a coin of Alauddin Khilji.[4] During the years 1874, 1875 and 1876, J. G. Delmerick contributed descriptions and delineations of a number of new and rare Pathan coins.[5] In 1881, he published the interesting coin of Samsuddin Kaimur.[6] In 1880, C. R Stulpnagel added a few new coins struck in the joint names of Ghiyasuddin and Muinuddin Bin Sam.[7] Then J Gibbs published some rare and new coins of this series.[8] In 1881, A. F. R. Hoernle described fourteen coins of Iltutimish and his successors, which formed part of a hoard found at Gauhati in 1880.[9] In 1889, he contributed a valuable paper on the copper coins of the Suri dynasty[10] and in 1899 and 1900 two papers on certain coins of Tughlaqs and Suris.[11] In 1894, W. Vost brought to light some interesting Suri coins.[12] In 1897, W. Haig published a hoard of 136 coins found at Wun in Berar belonging to Khilji and Tughlaq Sultans.[13] In 1900, H. N. Wright, published two papers under the title *Addenda to the Series of the coins of the Pathan Sultans of Delhi*, and recorded a number of coins that were missing in E. Thomas' work. But the most zealous contributor to the numismatography of the Pathan Sultans of Delhi during this period was C. J. Rodgers. He published a detailed paper on the silver coins of Suris[14] and submitted six supplementary lists to the work of E. Thomas during the years 1880 and 1905.[15] In these papers he described and delineated a large number of unnoticed and newly found coins of the Pathan Sultans.

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1. *PASB*, 1870, p. 181 ; 1873, p. 155 ; 1876, p. 19 ; 1877, p. 156 ; 1878, p. 64.
2. *JASB*, XL, p. 100.
3. *JASB*, XLII, p. 311.
4. *PASB*, 1872, p. 55.
5. *JASB*, XLIII, p. 97 ; XLIV, p. 126; XLV, p. 291.
6. *PASB*, 1881, p. 157.
7. *JASB*, XLIX, p. 29.
8. *NC*, V (3rd Ser.), p. 213.
9. *JASB*, L, p. 53.
10. *JASB*, LIX, p. 154.
11. *JASB*, LVIII, p. 30 ; LIX, p. 169.
12. *JASB*, LXIV, p. 37.
13. *PASB*, 1897, p. 63.
14. *IA*, XVII, p. 64.
15. *JASB*, XLIX, p. 81 ; 207 ; LII, p. 55 ; LV, p. 183 ; LXIII, p. 63 ; LXV, p. 213.

After a lapse of nearly 21 years, the coins of the Bengal Sultans again figured in the Indian numismatography. In 1862, E. C. Bayley published two small notes on this coinage. One related to a coin found at Rajshahi[1] and the other to the coins from the collection of Capt. Stubbs.[2] But it gained impetus only after the discovery of an extra-ordinary hoard of 13,500 silver coins of Pathan Sultans of Delhi and the Sultans of Bengal. It was found in 1863 at Cooch Bihar, in the northern Bengal, not far removed from the traditional capital of Kanteśvara Rājā, when a river bank fell during the rains. The hoard contained the coins covering a period of about one hundred and seven years, upto the end of the fourteenth century. Rajendra Lal Mitra published a note on this hoard in 1864.[3] He selected coins out of this hoard for the Calcutta mint, Asiatic Society of Bengal and Col. C. S. Gunthrie. These selections afforded to E. Thomas, the material for his invaluable monograph on *The Initial Coinage of Bengal.* It was first published in the *Journal of the Royal Asiatic Society*[4] and was later reprinted in the *Journal of the Asiatic Society of Bengal.*[5] After an introductory exposition of the Muslim system of coinage, the coins of ten Bengal rulers, beginning with Ruknuddin Kai Kaus and ending with Ghiyasuddin Azam Shah and those of Nasiruddin Mahmud Shah and Jalaluddin Razia, the Sultans of Delhi were described. An examination of these coins enabled Thomas to throw considerable light on the hitherto little or vaguely known history of the early muslim occupation of Bengal extending over a century and a half. However, there still remained much to be cleared up. In 1873, he published another paper, supplementary to the above, on the basis of another hoard of 37 coins, that was discovered near the fort of Bihar.[6] It included a few coins of Ghiyasuddin and others related to the Delhi Sultan Iltutimish. Still later, in 1881, some other obscurities of the Bengal history were removed by A. F. R. Hoernle, when a third hoard of 38 coins was discovered near Gauhati.[7]

In the meanwhile, H. Blochmann examined the collection of Asiatic Society of Bengal and a few other individuals and

1. *PASB*, 1862, p. 318.
2. Ibid., p. 436.
3. Ibid., p. 480, 579.
4. *JRAS*, II (N. S.), p, 145.
5. *JASB*, XXXVI, p. 1.
6. *JASB*, XLII, p. 343.
7. *JASB*, LII, p. 211.

published his results in three valuable papers that he published during the years 1873-1875 under the title *The Geography and History of Bengal*.[1] Here he described a large number of coins of eleven Sultans of Bengal and with their help he tried to settle a number of disputed or obscure points in the history of Bengal. Some additional information on the coins of Bengal Sultans was afforded by E. C. Bayley, who in 1873 noticed a coin of Muzaffar Shah.[2] In 1876, J. G. Delmerick described the coins of Bahadur Shah and Husain Shah.[3] In 1883 A. R. E. Hoernle discussed and published the coins of Mahmud Shah I and Barbak Shah.[4] In 1896, R. Burn brought to light a gold coin of Jalauddin Muhammad Shah. Thus by the end of the nineteenth century[5] the coins of Bengal Sultans became the best ascertained amongst the provincial Sultans.

The coins of the other provincial kingdoms, were only casually noticed during the entire nineteenth century, the period of the growth of Indian numismatography. It appears, the numismatists either lacked the material or they failed to create their interest in them. The discovery of a hoard of silver Larins at Sangameshwar in the Ratnagiri district in 1846, led the pioneer numismatist H. H. Wilson to contribute a paper on them under the title *Remarks on the So-called Fish-hook Money*.[6] Then in 1886, C. J. Rodgers wrote a paper on the coins of the Muslim kings of Ma'bar.[7] In 1869, H. Blochmann attended to Malwa coinage by publishing a gold coin of Ghiyas Shah.[8] In 1875 and 1876, J. G. Delmerick published two papers under the title *List of Rare Muhammadan coins*, where he described some coins of the rulers of Malwa, Jaunpur, Gulbarga and Kashmir along with the coins of the Sultans of Delhi and Bengal.[9] E. Thomas had published as early as 1864, a paper on the Muslim coins current in the markets of Gujarat districts; but coins of the Sultans of Gujarat were attended to only in 1889, when E. E. Oliver published a paper on them.[10] Detailed notice of the coinage of Gujarat was, however, taken by G. P. Taylor. First

1. *JASB*, XLII, p. 209; XLIII, p. 288; XLIV, p. 275.
2. *JASB*, XLII, p. 311.
3. *JASB*, XLV, p. 291.
4. *JASB*, LII, p. 211.
5. *PASB*, 1896, p. 108.
6. *NC*, XVI (1853), p. 179.
7. *JASB*, LXIV, p. 49.
8. *PASB*, 1869, p. 266.
9. *JASB*, XLIV, p. 126; XLV, p. 291.
10. *JASB*, LVIII, p. 1.

he published an exhaustive paper in 1893,[1] then published two papers, relating to coins that had bearings on the geneology of the rulers.[2] H. Blochmann was the first to take any notice of the coinage of Jaunpur. He published a paper on them, based on the copper coins that were dug up in Pratapgarh district, in 1870.[3] Thereafter, we have it noticed by J. G. Delmerick in his papers referred to earlier. In 1881, we have two notices of Jaunpur coinage. One from A. R. F. Hoernle and the other from R. Mitra.[4] But both of them just mention a few coins. The coinage of Kashmir was noticed, after Delmerick, by C.J. Rodgers, who published three papers on them; one related to copper and the other to silver and the third described a few rare coins of that Sultanate.[5] Later, R. B. Whitehead published a note on the gold coins of Kashmir.[6]

The coins of the Gazani rulers of Punjab were noticed by C. J. Rodgers, who published two notes about them, one in 1879 and the other in 1881.[7] On them we had earlier only two articles from the pen of E. Edward.[8] The coinage of Arab governors of Sindh remained almost neglected.

Turning to the Muslim states of the South, we find the earliest mention of their coins in R. H. C. Tufnell's *Hints to Coin-collectors in Southern India*, which was published in 1889.[9] Only a little earlier, in 1888, O. Codrington had published a paper on copper coins of the Bahamani dynasty.[10] He published another paper on the coinage of the Bahamani dynasty a little later.[11] Another paper on this subject was contributed by J. Gibbs. He wrote about the gold and copper coins of the Bahamanis.[12]

The Mughal numismatics remained unattended during the first half of the nineteenth century. We have nothing about them during this period, except the two notices about the few coins in the Asiatic Society of Bengal, referred to above. Only with the beginning of the third quarter,

1. *JBBRAS*, XXI, p. 278.
2. *NS*, VI, p. 271 ; XXVI, p. 494.
3. *PASB*, 1870, p. 151.
4. *PASB*, 1881, p. 39 ; 41.
5. *JASB*, XLVIII, p. 282 ; LIV, p. 92 ; LXV, p. 223.
6. *NC*, XIII (5th Ser.), p. 257.
7. *PASB*, 1879, p. 178 ; 1881, p. 4.
8. *JRAS*, 1848, p. 267 ; *JASB*, XXI, p. 115.
9. Madras, 1889.
10. *JBBRAS*, XVI, p. 99.
11. *NC*, XVIII (3rd Ser.), p. 259.
12. *NC*, I (3rd Ser.), p. 91.

was some attention paid to this branch of the Muslim numismatics. In 1850, Rajendra Lal Mitra gave a note on the Mughal coins presented to the Asiatic Society of Bengal by Mr. Gubbins.[1] Then in 1864, he published a paper on the zodiacal rupees of Jahangir.[2] This was followed by three papers by H. Blochmann ; one on the coins of Jahangir of Lahore mint, published in 1869 ;[3] the other on a coin of Bedar Bakht in 1871,[4] and the third on a silver coin of Shahjahan II in 1876.[5] The latter two are mere notices. During the last quarter of the century, we find numismatists taking more interest in the Mughal coins. C. J. Rodgers, with his usual zeal for each and every coin, of whatever period it might be, came forward with his first paper on the copper coins of Akbar in 1880[6] and after that he wrote several papers relating to the coins of Akbar, Jahangir, Aurangzeb, Shuja, Murad, and Azamshah.[7]. J. Gibbs, in 1883, brought to light the gigantic Mughal coins of Shahjahan and Aurangzeb[8] and gave an interesting paper on the zodiacal gold and silver coins of Jahangir.[9] J. C. Delmerick wrote two notes in 1884, one on the silver coins of Dawar Baksh[10] and the other on a gold coin of Kam Baksh.[11] In 1895, W. Vost wrote an interesting paper on the Mughal mint Dogam,[12] and in 1898, W. Irvine discussed the mint rules of the Mughals based on a manuscript dated 1126 A. H.[13]

All the while during this century, there were a number of coin-collectors amongst the English officers of the East India Company, scattered all over the country. Most of them, when they retired from service and went back to their homes, passed on their collections of Indian coins to the British Museum. As such, the British Museum had accumulated a rich treasure of Indian coins. S. Lane-poole, took upon himself to systematically examine all the coins of the Muslim period and prepare their exhaustive catalogues. He produced

1. *PASB*, 1850, p. 346.
2. *PASB*, 1864, p. 483.
3. *PASB*, 1869, p. 245, 255.
4. *PASB*, 1871, p. 97.
5. *PASB*, 1876, p. 139.
6. *JASB*, XLIX, p. 213 ; *IA*, XIX, p. 219.
7. *JASB*, LIII, p 97 ; LIV, p 55 ; *PASB*, 1894, p. 90 ; *JASB*, LVII, p 18 ; *PASB*, 1880, p. 3 ; etc.
8. *PASB*, 1883, p. 3.
9. *JBBRAS*, XIV, p. 155.
10. *PASB*, 1884, p. 60.
11. Ibid., p. 90.
12. *JASB*, LXIV, p. 69.
13. *PASB*, 1898, p. 149.

between the years 1875 and 1892 a number of catalogues on Oriental and Indian coins. While in one of the volumes on the Oriental coins, he dealt with the Gazanavid coins of the Punjab, he published three volumes exclusively on Indian coins. The first of this series was published in 1884 and related to the coinage of the Sultans of Delhi ; the second volume saw the light next year, in 1885, and dealt with the various Sultanates. The third volume was published in 1892, after the lapse of seven years, and dealt with the Mughal coins.

Hardly had Lane-poole finished his work, when the great numismatist C. J. Rodgers came forward with a long chain of catalogues in 1891. He had a very rich personal collection of the Indian coins belonging to all periods of Indian history and almost of all the dynasties. When this collection was purchased by the Punjab Government for the Lahore Museum, he undertook upon himself the preparation of catalogues on behalf of the Government ; and in course of time he published five volumes. The first one, which was published in 1891 was a general catalogue and contained the coins of almost all series, ancient and medieval, and included even foreign coins In 1894, he published two volumes, one dealing exclusively with the Mughal coins and the other with all the other Indian Muslim coins. The remaining two volumes were published the next year in 1895 and one of them related to very miscellaneous coins, and it included some Muslim coins.

C. J. Rodgers also undertook the preparation of the catalogues of the coins in the Indian Museum, Calcutta, and brought out four volumes during the years 1893-1896. The first volume related to the Sultans of Delhi and their contemporaries of Bengal, Gujarat, Jaunpur, Malwa, Deccan and Kashmir. The second volume contained the coins of the Mughals, East India Company and the native states. The remaining two volumes were related mostly to the ancient coins of India.

With the advent of the twentieth century, the Indian numismatography entered into a new era. The publication of the coin-catalogues referred to above, an independent publication of *Numismatic Supplements* in 1904 associated with the *Journal of Asiatic Society of Bengal*, and the foundation of the Numismatic Society of India in 1910, gave new impetus to coin-collectors and numismatists. The catalogues placed at their disposal, necessary material about the Indian coins ; the Numismatic Supplements gave them forum to express their views and discuss their coins ; and the Society co-ordinated the scattered forces of the numismatists and coin-collectors.

All this gave a great fillip to the Indian numismatics. So long the writing on coins was exclusively confined to the European civil and military officers, but from now onwards, the Indian coin-collectors also came forward and placed their rarities of coins before us.

The new band of numismatic workers, that cropped up during this century, continued on the one hand to publish new and rare coins that came to their notice, and on the other, they also published from time to time catalogues and long articles, assessing what had been known or discovered. Some attempts were also made to interpret the coins in terms of history and use them as source material. But unfortunately this aspect of numismatography did not find much encouragement at the hands of historians. The historians never cared for the coins of the medieval period as they had before them vast amount of written material on the history. However, what has been done or achieved during the last sixty years of the present century in the Indian Muslim numismatography may be summed up as follows :

Early Muslim Rulers

The coins of the Gaznavid rulers of the Punjab and of the Arab Governors of Sindh remained more or less where C. J. Rodgers and E. Thomas had left in their respective field. We have only two small papers on the tiny silver coins of the Arab Governors of Sindh; one by W. Vost[1] and the other by B. N. Reu,[2] who examined a few coins from some hoards found in the Ajmer - Marwar area. A few Gaznavid coins found at Loni in Punjab are mentioned by O. Prufer.[3] The bi-lingual Taṅka of Mahmud Gazni, which bears the Kalima etc. in Arabic on one side and the same translated into Sanskrit, written in Nāgarī, on the other, was dealt by K. N. Dikshit[4] and then by V. S. Agrawala.[5] The former attempted to read the Nāgarī legend, while the latter distinguished two varieties of the coin, based on the difference in the Nāgarī legend and discussed the implications and meanings of the terms used in the Sanskrit legend. The most notable event in the numismatography of this series of coins is the discovery of a gold coin of Muhammad Gazni by C. R. Singhal in the

1. *NS*, XI, p. 308.
2. *JNSI*, IX, p. 124.
3. *JNSI*, XIV, p 115.
4. *NS*, XLVI, p. 29.
5. *JNSI*, V, p. 155.

collection of the Prince of Wales Museum.[2] It bears an interesting marginal legend, meaning *'This dinnar (is struck) for the cities (subdued) during the holy war against India.'* It is dated 397 A.H. Singhal, while publishing this coin, also discussed its historical implications. However, what is known today about the coinage of these two series is meagre. Much attention is needed to them, particularly to the coins of the Arabs of Sindh; a number of hoards of these coins are lying unstudied in the Museums at Jodhpur and Udaipur.

Sultans of Delhi

During the early part of this century, E. Thomas' *The Chronicles of the Pathan Kings of Delhi* was the starting point for the study of the coins of the Sultans of Delhi. So, whosoever worked on this coin series, his attempt was mostly to bring to light such coins, which were not mentioned there. The coins, thus published, either disclosed a new date, not mentioned in the *Chronicle*, or the name of a new mint and, in rare cases, rulers, who were not known earlier. At times, contents of the hoards of the coins of these rulers were described. H. N. Wright had already published two papers in 1900, describing some unnoticed coins.[2] Now he published five papers within a period of fifteen years. One related to the coin of Ghiyasuddin Balban of Sultanpur mint,[3] other to a coin of Muhammad Tughlaq of Daulatabad mint.[4] In one paper he described a hoard of 110 coins found at village Belbari in Malda district which contained the Suri coins along with the two coins of Nasarat Shah of Bengal.[5] Some small denominational coins of the Delhi Sultans were the subject of one paper.[6] In another of his papers he came with the suggestion that the gold coin bearing the date 727 minted at Delhi, which was earlier considered to be freak, was really the coin of Muhammad bin Tughalaq issued in the memory of his father.[7] During this period, in 1907, he published the *Catalogue of the Coins of the Indian Museum, Calcutta* (Vol. II), which dealt with the Muhammadan series and included the coins of the Sultans of Delhi and the six other contemporary Sultanates. With a very brief introduction, he described the coins properly classified.

1. *JNSI*, XVI; p 123.
2. *JRAS*, 1900, p. 481 ; 769.
3. *NS*, I, p. 3.
4. *NS*, V, p. 121.
5. *NS*, II, p. 7.
6. *NS*, XXVII, p 129.
7. *NS*, II, p. 4.

This was an advancement over the Catalogues of Rodgers which were more in the nature of inventories. G. B. Bleazby contributed four notes in 1904, dealing with the coins of Samsuddin Kayamurs (Delhi mint), Shihabuddin Umar,[1] Muhammad Tughlaq (Lakhnauti mint),[2] a silver coin of Firoz Shah III (which are still extremely rare)[3] and a square silver rupee of Sher Shah (another rarity).[4] In 1907, R. Burn described a hoard of 85 coins found in Murshidabad district, which contained Delhi and Bengal coins.[5] Thereafter this distinguished numismatist wrote about the Pathan coins only in or about 1933, when he contributed a paper relating to Muhammad Tughlaq's forced coinage to emend the early reading of its legend.[6]

In 1910, J. Allan published the gold and silver coins of this series, which were added to the British Museum after the publication of its *Catalogue* in 1885.[7] The same year, R. B. Whitehead brought to light some rare coins of Balban, Samsuddin Mahmud Shah, Muhammad bin Tughlaq, Firoz Shah Zafar and Muhammad bin Firoz.[8] The next year, in two papers, he dealt with the coins of Samsuddin Mahmud Shah and attempted to identify the ruler bearing this name.[9] J. Gibbs published some rare and unpublished coins of the Pathans[10] Then came H. Nevill in 1912 and held the field till 1921. During this period he contributed nine articles. In four of them, he described new and rare coins of Tughlaq, Saiyad and Lodi dynasties.[11] One of his papers related to a hoard of 5000 billon coins of Sikandar Lodi, found at Hardoi.[12] In another paper, he identified the Suri mint Shahgarh;[13] the third dealt with the coinage and history of Firoz Shah Zafar, son of Firoz Shah.[14] The other two articles, which he contributed in 1921, are the most important contributions of the author. In one for the first time he dealt

1. *NS*, II, p. 3.
2. Ibid., III, p. 6.
3. Ibid., p. 6.
4. Ibid., p. 7.
5. *NS*, VIII, p. 587.
6. *NS*, XLIV, p. 5.
7. *NS*, XVI, p. 694.
8. *NS*, XIV, p. 565.
9. *NS*, XVII, p. 123 ; *JPHS*, I, p. 81.
10. *NC*, V (3rd Ser.), p. 213.
11. *NS*, XXXV, p. 156 ; 160 ; 189 ; 195.
12. *NS*, XXVI, p. 479.
13. *NS*, XVIII, p. 228.
14. *NS*, XXXV, p. 19.

exhaustively on the mint-towns of the Delhi Sultans[1] and in the other their currency.[2] In the latter paper, Nevill discussed the denominational value, the proportionate alloy of silver and copper and the weight of billon and copper coins of the Pathans. In 1924, he, jointly with H. N. Wright, contributed another valuable paper on the Metrology of these coins.[3]

In 1915, Panna Lal published a rupee of Alam Shah[4] and R. D. Banerji, in 1916, brought to light some coins of Sher Shah showing new varieties and bearing new mint-names —Panduah, Chunar and Kalpi.[5] In 1921, H. M. Whittel presented a complete list of the coins of Muhammad Tughlaq.[6] In 1922, Prayag Dayal published a silver coin of Qutubuddin Mubarak of Darul-Islam mint.[7] Then in 1927, R. M. Antani gave a note on a small coin of Sher Shah of Agra mint dated 948 A. H.[8]. In 1929, Durga Prasad brought to light, a silver coin struck in Nepal in the name of Alauddin Khilji,[9] a most notable discovery. The same year, H. E. Stapleton described a hoard of 182 coins of Bengal and Suri kings found at Raipara in Dacca district.[10] The same year, S. H. Hodivala discussed the coin-nomenclature Shash-kāni or Shashgāni.[11]

In 1925, Prayag Dayal brought out the *Catalogue of the Coins of Sultans of Delhi in the Lucknow Museum.* This was an important contribution in the field, as it brought together the coins of all the Sultans of Delhi at one place. But since it is not a corpus, it does not contain exhaustive material. It was only in 1936, that the entire numismatic material, known till then, was put together by H. N. Wright in his work entitled *The Coinage and Metrology of the Sultans of Delhi.* Though the nucleus of this work is author's own collection of the coins of Delhi Sultans, which he had formed during the years 1894 and 1924 and was later acquired by the Director General of Archaeology in India for Delhi Museum, it has covered a much wider field. All the

1. *NS*, XXXV, p. 116.
2. *NS*, XXXV, p. 21.
3. *NS*, XXXVIII, p. 25.
4. *NS*, XXVI, p. 483.
5. *JBORS*, V, p. 80.
6. *NS*, XXXV, p. 130.
7. *NS*, XXXVI, p. 36.
8. *NS*, XL, p. 3.
9. *NS*, XLII, p. 37.
10. *NS*, XLII, p. 5.
11. *NS*, XLII, p. 46.

recorded coins of this series as well as a number of unpublished coins from various collections, to which the author had access, are also included. Thus it is a complete inventory of the types and varieties of the coinage of Delhi Sultanate with relevant informations about them. With the publication of this work, Thomas' work became obsolete.

But this work also cannot be claimed as complete and final. After its publication, a number of new coins were discovered. C. R. Singhal brought to light a quarter rupee[1] and a 1/20th pice of Sher Shah[2], a billon coin of Mahmud, son of Muhammad bin Sam[3], a gold coin of Razia, a gold coin of Muhammad Tughlaq of Tughalaqabad mint, a gold coin of Iqbal Shah, a ruler unknown from other sources, and a mintless gold coin of Sher Shah.[4] P. S. Tarapore published a gold coin of Ruknuddin Ibrahim,[5] small denominational copper coins of Jalaluddin Firuz II and Nasiruddin Khusru and a half rupee of Islam Shah.[6] A hoard of gold coins was published by A. S. Alteker, which included a coin of Nasiruddin Mahmud Shah along with the coins of the Yadavas of Devagiri.[7] A freak gold coin of Muhammad bin Tughlaq was noticed by S. A. Shere.[8]

Some interesting discussions on problems arising out of some of the coins of this series also found the attention of some of the scholars. S. H. Hodivala discussed the question of the identity of Samsuddin Mahmud Shah ;[9] H. Kaus, the title *Hazarat* of the Sultanpur mint.[10] Coin bearing the name of Prithviraj on one side and of Muhammad bin Sam on the other drew the attention of Kunwar Devisingh[11] and provoked a lively discussion in which P. L. Gupta,[12] D. C. Sircar,[13] A. S. Alteker[14] and Dasharatha Sharma[15] participated.

1. *JNSI*, I, p. 14.
2. *JNSI*, II, p. 135.
3. *JNSI*, V, p. 165.
4. *JNSI*, XVI, p. 126.
5. *JNSI*, IX, p. 116.
6. *JNSI*, XII, p. 165.
7. *JNSI*, VIII, p. 147.
8. *JNSI*, V, p. 162.
9. *JNSI*, III, p. 105.
10. *JNSI*, VII, p. 64.
11. *Nagari Pracharini Patrika*, LVII, p. 59.
12. Ibid., p. 270.
13. *JNSI*, XV, p. 229.
14. Ibid , p. 234.
15. *JNSI*, XVI, p. 122.

However, the most notable event in the numismatography of this series, is the discovery of a treatise *Davva-Parikkhā*, an Apabhraṁśa work of Thakkura Pherū, the mint master of the Delhi mint during the reigns of Khiljis. Thakkura Pherū was a person endowed with great scholarship, practical commonsense and experience. His treatise is known from a single manuscript comprising six scientific texts written by the same author, now in the possession of Agarchand Nahta of Bikaner. The *Davva-Parikkhā*, dated V. S. 1375 (1310 A. D.) records faithfully the coins that were being received and accepted in the mint for conversion into new money and the coins that were being minted in his mint during the reigns of Alauddin Muhammad Khilji and Qutubuddin Mubarak Khilji. He has listed about 200 coins of various dynasties and localities, that were then current in the market and cover the period of about two centuries that preceded the Khilji rule. Here the metals of the coins, their relative exchange value and the exact content of metal in alloy is tabulated. But far more important to the numismatists of the Sultanate period is the last portion of the work, which mentions the pre-Khilji Delhi coins and the Khilji issues, for which, he was himself responsible. It reveals many facts that were unknown till now and produces such material that necessitates the revision of many views regarding the metrology, denomination and other allied topics of the Delhi coinage. The work is still unpublished but this portion has been described and discussed by me in the *Journal of the Numismatic Society of India*.[1]

Provincial Sultans

During this period, no notice seems to have been taken of the coins of Sultans of Kashmir. Jaunpur coinage was touched only by two numismatists. In 1915, H. R. Nevill described a copper coin which was till then unknown.[2] In 1922, H. M. Whittel published an exhaustive paper on the coinage of Jaunpur, giving all details known till then.[3] Thereafter, it seems, the subject was forgotten. Bengal coinage, however, continued to attract the numismatists who brought to light from time to time new material and also discussed the historical implications of Bengal coinage. Among the new material, there were not much of new types or varieties; mostly these were the discoveries of hoards.

1. *JNSI*, XIX, p. 35.
2. *NS*, XXVI, p. 490,
3. *NS*, XXXVI, p. 10.

In 1904, R. Burn published a gold freak bearing the legend of Mahmud I on one side and that of Mahmud II on the other.[1] In 1907, he published a hoard of 85 coins from Murshidabad, which included the coins of Ruknuddin, Kai Kaus, Bughda Shah, Bahadur Shah, Alauddin Alishah, Sikandar Shah son of Ilyas Shah.[2] Then R. D. Banerji published gold coins of Shamsuddin Muzaffar Shah and Giyasuddin Mahmud Shah in 1911[3] and 1919 respectively.[4] In between, he published a silver coin in 1914 as belonging to Jalaluddin Mahmud Shah,[5] which subsequently proved to be the issue of Bahamani dynasty. In 1912, H. R. Nevill described billon coin of Ghiyasuddin Bahadur Shah[6] and brought to light a hoard of 100 silver coins from Khulna in 1915.[7] Then in 1922, N. K. Bhattashali published a monograph entitled *Coins and Chronology of the Early Independent Sultans of Bengal*. This monograph, though based on the find of a hoard, included earlier material also and dealt the subject exhaustively. Thereafter in 1929, P. Thorburn published a silver coin of Ghiyasuddin Iwaz.[8] Shamsuddin Ahmad published a rare copper coin of Barbak Shah, which was found at Gaur.[9] Then in 1939, he described a hoard of 20 coins from Bardwan[10] and in 1943, another hoard of 72 coins from Kalna.[11] In 1945, S. A. Shere brought to light a hoard of 18 gold coins found in Shahabad district (Bihar); it included 8 coins of Bengal Sultans—Nasiruddin Mahmud Shah II and Alauddin Husain Shah[12] By this time the publication of the coins of Bengal Sultans almost exhausted and now the scholars looked at them as the source of history In 1947, N. B. Sanyal discussed the date of the Restoration of the House of Ilyas Shah.[13] Then in 1954, A. H. Dani raised the question whether Ghyathuddin Iwad Khilji had received any investure from the Khalifa.[14] A year later A. Karim touched the same subject under the title 'Khalifa as recognised in the coins of Bengal Sultans'.[15] In

1. *NS*, III, p. 14.
2. *NS*, VIII, p 587
3. *ASI, AR*, 1911-12, p. 167.
4. *JBORS* V, p. 85.
5. *ASIAR*, 1913-14, p. 257.
6. *NS*, XVIII, p. 228.
7. *NS*, XXVI, p. 484.
8. *NS*, XLII, p. 23.
9. *NS*, XLVI, p 111.
10. *JNSI*, I, p. 36.
11. *JNSI*, V, p. 65.
12. *JNSI*, VII, p. 41.
13. *JNSI*, IX, p. 45.
14. *JNSI*, XVI, p. 243.
15. *JNSI*, XVII, p. 86.

1956, he discussed the relation of Sultan Samsuddin Firoz Shah with his children.[1] He gave a note on the mints Nasaratabad and Muzafarrabad in 1957.[2] In 1959, he discussed the coins of Mughith-al-din Yuzbak and showed that they were issued to commemorate the victory over Nadiya and Mandaran.[3] In 1959, A. Karim described 5 coins from a hoard found in Darbhanga district. Lately he has discussed the problem of the rebellion of Iwaz and the Bengal issues of Iltutimish.[4] Hasan Shah's expedition agaist Kamrup has been discussed by M. R. Tarafdar.[5] However, the most notable activity in the numismatography of Bengal is the publication of the *Corpus of the Muslim Coins of Bengal* in 1960[6] by A. Karim. Here the author has compiled the results of the contribution of the earlier numismatists. Recording the published coins, he has critically examined the views of the scholars and has arrived at his own conclusions. Besides the published material, unpublished material from private and public collections are also included. The latest paper on this coinage is from Monira Khatun, a budding numismatist, where she has brought to light fractional silver coins, hitherto unknown.[7]

It has already been mentioned that G. P. Taylor had published a lengthy paper on the coinage of Gujarat Sultans in the later part of the nineteenth century referred to above. Thereafter he published another paper in 1905,[8] where he discussed those coins of the Sultans which had the geneology of the issuing Sultan. In 1915, he published another paper on the same subject and dealt with the coins of Ahmad I.[9] In 1911, A. Master published two rare coins of Mahmud I dated 874 and 878.[10] Then in 1926, he dealt with the coinage of the Gujarat Sultans in detail and discussed the title and inscriptions found on these coins.[11] It was followed by an article from S H. Hodivala, who described a number of unpublished coins and discussed the metrology of this coinage.[12] In another paper, he succeeded in attributing the

1. *JNSI*, XVIII, p. 76.
2. *JNSI*, XIX, p. 84.
3. *JNSI*, XXI, p. 54.
4. *JNSI*, XXII, (Altekar Commemoration Volume) p. 205 ff.
5. *JNSI*, XIX, p. 54.
6. Published by Asiatic Society of Pakistan, Dacca.
7. *JNSI*, XXII, p. 212.
8. *NS*, VI, p. 271.
9. *NS*, XXVI, p. 494.
10. *NS*, XVII, p. 131.
11. *NS*, XL, p. 6.
12. *JBBRAS*, II (N. S.), p. 19.

copper coins bearing the title *Shah-i-Hind*, which were earlier thought to be the coins of Humayun the Mughal ruler, to Bahadur Shah of this dynasty.[1] A little earlier, T. B. Horwood had published a coin bearing the name Muzaffar Shah bin Muhammad Shah and the mint Mandu with date 963. He doubtfully suggested it to belong to Muzaffar II.[2] Then K. N. Dikshit brought to light two coins of Muzaffar I of Mustafabad mint dated 926 and 932.[3] The numismatography of Gujarat Sultans took a great stride only when C. R. Singhal examined a hoard of 6100 copper coins of these Sultans found in 1923 at Marol (Bombay). He described them first in a paper.[4] Thereafter he undertook the study of the coins of Gujarat Sultans and in 1934 published a paper on some unknown mints[5] and next year he brought out his *Catalogue of the Coins of the Sultans of Gujarat in the Prince of Wales Museum*. It includes not only the coins of the Prince of Wales Museum but also those which are unrepresented there but are known in other collections. It is a kind of corpus on this series. Singhal had been writing on the subject from time to time and bringing out the new material that came to his notice. He published a Muhar of Mahmud Begda of Muhammadabad *urf* Champaner mint,[6] silver coin of Sikandar Shah,[7] a silver coin of Mahmud Shah II dated 932.[8] He also published a copper coin which he at first thought to be of Muhammad Shah II but later assigned it to Ahmad II.[9] His latest contribution deals with a hoard of gold coins of these Sultans[10] Prior to the find of this hoard, gold coins of this Sultanate were scarce. R. Burn wrote an article in 1939 to discuss the geneology of Ahmad Shah III;[11] in 1947, P. S. Tarapore wrote a note to bring to notice coins of Sikandar Shah.[12] The only other paper on the coinage of this series is from B. L. Mankad, which deals with three coins from Taleja but adds nothing new.[13]

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1. *NS*, XL, p. 28.
2. *NS*, XXXVII, p. 40.
3. *IA*, XLVIII, p. 122.
4. *IA*, LVII, p. 215.
5. *NS*, XLV, p. 93.
6. *JNSI*, I, p. 40.
7. *JNSI*, IV, p. 151.
8. *JNSI*, VI, p. 48.
9. *JNSI*, I, p. 109.
10. *JNSI*, XV, p. 195.
11. *JNSI*, I, p 42.
12. *JNSI*, IX, p. 119.
13. *JNSI*, XVIII, p. 215.

The coinage of Malwa came to the focus of the numismatists when, in 1904, L. Whiteking published a long paper dealing exhaustively with the history and coinage of Malwa.[1] Yet not much has been written about this series. In 1913-14, R. D. Banerji described silver coins of Mahmud Shah II which were found in hoard at Dewas (Junior).[2] In 1932, H. Nelson Wright brought an addenda to the Malwa coinage based on the find of 3000 copper coins in Hoshangabad district.[3] Later he brought out a supplement to Whiteking's work, where he included new material from his own collection and the collections of the British Museum, Indian Museum, Calcutta, State Museum, Lucknow and S. T. M. Hamilton and P. Thorburn.[4] This was later, in 1937, re-supplemented with some new material by C. R. Singhal.[5] He described a number of unpublished coins. In 1939, he brought to light a gold coin of Mahamud Shah Khilji dated 849.[6]

The coins of Faruqi Sultan of Khandesh are more or less neglected. C. R. Singhal assigns a few copper coins to Nasir Shah Faruqi,[7] which he had once attributed to Nasir Shah of Gujarat[8] and then to Nasir Khan of Kalpi.[9] Bahadur Shah is another ruler of this dynasty, to whom Singhal has attributed some coins.[10] These are those coins which he had earlier attributed doubtfully to Qadir Shah of Malwa,[11] and M. K Thakore, disagreeing with him, thought them to be the coins of Muhammad Shah or Mubarak Shah sons of Adil Shah.[12] It is essential that some of our numismatists attend to this series.

Now coming to Deccan, the coinage of the Bahamanis attracted the attention of R. Burn in 1905, when he brought to light some unnoticed coins of Firoz Shah, Ahmad Shah I and II, Humayun Shah, Nizam Shah and Muhammad Shah from a hoard of 869 copper coins found in Buldana District.[13] Then in 1908, F. J. Thanawala described some interesting silver coins of Bahaman Shah, Muhammad Shah I and II,

1. *NC*, III (4th Ser.) p. 356 ; IV, p. 62.
2. *ASI, AR*, 1913-14, p. 256.
3. *NS*, XI, p. 315.
4. *NC*, XI (5th Ser.), p. 291 ; XII, p. 13.
5. *NS*, XLVII, p. 119.
6. *JNSI*, I, p. 38
7. *JNSI*, VI, p. 46.
8. *NS*, XLII, p. 40.
9. *JNSI*, II, p. 133.
10. *JNSI*, XII, p 154.
11. *JNSI*, VI, p. 50.
12. *JNSI*, IX, p 36.
13. *NS*, VII, p. 53.

Daud Shah, Firuz Shah, Ahmad Shah II and Mahmud Shah and copper coins of Waliullah and Karimullah.[1] In 1913, C. J. Brown described two hoards of Bahamani copper coins from Bhandara district, one of 196 and the other of 600 coins.[2] In 1918, H. M. Whittel discussed the reign of Alauddin Bahaman Shah on the basis of coins.[3] In 1923, he brought out an exhaustive catalogue describing 66 coins of the Bahamani rulers, with a bibliography of the published material.[4] This was the first attempt to put together the material of Bahamani numismatography. In 1939, Muhammad Ismail described a gold coin of Humayun Shah Alim.[5] In the same year, M. A. Suboor pointed out to a number of erroneous statements of Farishta on the basis of the numismatic material.[6] Then P. S. Tarapore published in 1930 a silver coin bearing the name Ghyasuddin Tehmatan Shah dated 799 A. H. issued from Ahsanabad mint.[7] This coin evoked a controversy. C. R. Singhal doubted the reading of the name as Tahmatan Shah and suggested it to be the coin of the 6th ruler of the dynasty Ghyasuddin Bahaman Shah.[8] Tarapore reinstated his views in two rejoinders, once in 1942[9] and for the second time in 1954.[10] This is supplemented by two notes, one by G. Yazdani and the other by V. S. Agrawala, where Tarapore's reading of the name is held valid. In 1935, E. E. Speight published a corpus of the Bahamani coins, incorporating all the known varieties and types of the Bahamani coinage.[11] Since then, P. S. Tarapore,[12] C. R. Singhal,[13] Hurmuz Kaus,[14] A. H. Siddiqi[15] and Dinkar Rao[16] have published a number of coins that are missing from the corpus of E. E. Speight. Notes by P. S. Tarapore[17] and H. K. Sherwani[18] on the Fathabad mint may also be noticed

1. *NS*, XI, p. 309.
2. *NS*, XXII, p 196.
3. *NS*, XXXII, p. 475.
4. *NS*, XXXVII, p. 22.
5. *NS*, XXXIX, p. 47.
6. *NS*, XXXIX, p. 36.
7. *NS*, XLIII, p. 55.
8. *JNSI*, II, p. 131.
9. *JNSI*, IV, p. 67.
10. *JNSI*, XVI, p. 256.
11. *Islamic Culture*, April 1935, p. 268.
12. *JNSI*, XI, p. 154.
13. *JNSI*, I, p. 39.
14. *JNSI*, VII, p 61-62.
15. *JNSI*, XX, p. 226.
16. *JNSI*, XX, p. 228 ; XXI, p. 78 ; XXII, p.
17. *JNSI*, VII, p. 46.
18. *JNSI*, VIII, p. 177.

in this connection. However, most noteworthy in the field of Bahamani numismatography are the works of H. K. Sherwani. He published an article entitled "Bahamani Coinage as a source of Deccan History" emphasizing the importance of these coins as source material[1] and himself utilised this material very ably in his book entitled *Bahamanis*. Probably this is the first and the only work on medieval Indian history, where the coinage has found prominent place as source material.

The coins of the Sultanates that arose on the ruins of Bahamani kingdom have not received much attention as yet. G. P. Taylor wrote two articles about the Adil Shahi coinage in 1910, one relating to copper coins[2] and the other to silver Larins,[3] next year he wrote about three gold coins of Muhammad Adil Shah.[4] Then in 1921, T. Sreenivas brought to light a fourth specimen of the gold coin of Muhammad Adil Shah that Taylor had published.[5] Then in 1922, Muhammad Ismail in two small notes discussed the epithet *ahlā-halī* found on the copper coins of Ibrahim Adil Shah I.[6] In 1925, he noticed four gold coins of Muhammad Adil Shah discovered in the Bijapur district.[7] This is all that we had till 1954, when we heard again about Adil Shahi numismatics from G. H. Khare. He brought out some information about the gold coins of Muhammad Adil Shah from various sources.[8] The Nizam Shahi coins were singularly described by F.J. Thanwala in 1905.[9] Since then, nothing has been heard about it. There is much to be done for this series of coins. Qutb Shahi coins of Golconda had no better position in the numismatography of Indian coins till recently. In 1908, R. Burn had published a find of 3800 copper coins in Wun (Berar) which included coins dated 1068 and 1095 A. H. having similar legends.[10] He had assigned them to Abdulla Qutb Shah and Abul Hasan. Thereafter only in 1943, we have a paper from P. M. Joshi, where he has described the coins current in Golconda kingdom,[11] but there is nothing particularly about the Qutb Shahi coins in it. In 1955 and 1960, Hurmuz Kaus published three valuable articles about the

1. *B.V. Patkar Commemoration Volume*, p. 204.
2. *NS*, XV, p. 678.
3. Ibid., p. 687.
4. *NS*, XVIII, p. 227.
5. *RAIAN* 1921-24, p. 28.
6. *NS*, XXXVI, p. 36 ; XXXIX, p. 20.
7. *NS*, XXXIX, p. 43.
8. *JNSI*, XVI, p. 130.
9. *NS*, VII, p. 51.
10. *NS*, XI, p. 317.
11. *JNSI*, V, p. 85.

Qutb Shahi coins where he described a number of coins.[1] In 1958, Dinkar Rao described a copper coin of Muhammad Quli Qutb Shah.[2] The most important contribution in this field has recently come from Muhammad Abdul Wali Khan, who has published this year a monograph entitled *Qutub Shahi Coins in the Andhra Pradesh Government Museum*. In it, he has brought together all the available material on the subject along with 385 coins from the Museum collection. This fulfills the need of a corpus to a great extent. Lately Dinkar Rao has published a copper coin.[3] Lastly, the Barid Shahi coins of Bidar have so far been noticed only by Hurmuz Kaus[4] and Dinkar Rao.[5]

The coinage of the Sultans of Ma'bar was first noticed by C. J. Rodgers. Then in 1909, E Hultzch, incorporating all previous information about this coinage, described the copper coins[6] Thereafter, Desikachari and Rangachari brought to light 25 silver and copper unpublished coins from four different collections.[7] Lately, a gold coin of Nasiruddin Mahmud was added to the list of known coins by C. R. Singhal.[8]

Mughals

Though the coinage of the Mughal dynasty did not attract the scholars of the nineteenth century, it has had the attention of the largest number of numismatists and coin-collectors during all these years of the twentieth century, and the largest number of papers have been contributed about it However, the numismategraphy of this period is mostly confined to publishing the coins of the new dates and mints. Every coin-collector who found a coin bearing a mint name or date not known to him, came out with a note. It is not possible to enumerate all these publications here.[9] Suffice it is to say here that these notes necessitated from time to time the publication of the mint lists. The first list was prepared by R. Burn just in the beginning of the century.[10] He tabulated the list

1. *Num. Cir.*, LXIII, No. 5 ; LXVIII, Nos. 4 and 5.
2. *JNSI*, XX, p. 20.
3. *JNSI*, XXII, p. 281.
4. *JNSI*, VII, p. 51 ; XI, p. 38.
5. *JNSI*, XX, p. 230.
6. *JASB*, LXIV, p. 49.
7. *IA*, XXXI, p. 231.
8. *JNSI*, X, p. 134.
9. For notes and articles on Mughal coins please refer to Singhal's *Bibliography* and *Indices* of the *JNSI*.
10. *JASB*, LXXIII, p. 75.

of the Mughal mints showing the name of mints which worked for gold, silver and copper under each Mughal ruler. In 1904, Codrington published the *Manual of Musalman Numismatics*. There, he also listed the Mughal mints G. P. Taylor came out immediately with a review of these two lists[1] and in 1905, he published his own list,[2] where he named 191 mints, of which some had double names, whose inclusion swelled the number to 222. Taylor did not include 24 names that were in Codrington's list as he had himself not seen coins of those mints. About eight of them, he expressed his doubts, and for the remaining, he accepted the possibility of their existence. Thus including these 16 mints, they numbered 238. In 1912, R. B. Whitehead came out with a new list which included only 221 mints.[3] He omitted a number of mints for various reasons but at the same time, he included a few new names. Next year, G. P. Taylor published a complimentary list to it.[4] Then in 1914, Whitehead himself published a supplement to his earlier list, wherein he made certain corrections and added a few new names.[5] Thereafter, there was a lull. In 1953, C. R. Singhal came out with a list,[6] which was based on the original list of Whitehead and also included the mint-names that had come to light since then. S. H. Hodivala, in an interesting article, drew our attention to Abul Fazl's inventory of Akbar's mint and attempted to correlate it with the existing numismatic material.[7] A cumulative study of the mint-towns of Akbar was recently made by me[8] wherein I have shown that though no less than 86 mint-towns of Akbar are known, not more than four or five for gold and about eight for silver worked at a time. Most of the mint-towns are really camp-mints or army mints. The result brought out by this study necessitates the scrutiny of the entire mint list of the Mughals to cull their real historical significance.

Another direction, in which the work was done in the Mughal numismatics, is the geographical identification of the mint-towns, known from the coins. But only a few

1. *NS*, III, p. 9.
2. *JBRAS*, Centenary Volume, p. 411.
3. *JASB*, VIII (N. S.), p. 425.
4. *NS*, XXII, p. 178.
5. *NS*, XXV, p. 231.
6. *Mint-Towns of The Mughal emperors of India*, (Memoir No. 4 of the Numismatic Society of India).
7. *NS*, XXXIV, p. 165.
8. *Essays Presented to Sir Jadunath Sirkar*, Punjab University, 1958, p. 154.

scholars have attended to it. The largest contribution on this topic has come from the pen of S. H. Hodivala.[1] He has tried to locate the mint places, correct the reading of the mint names and also discussed the historical importance, where it was necessary. Hodivala also studied the metrology and the terminology of Mughal coins and discussed such terms like *Tankis* (of Akbar), Muradi Tanka, Nurjahani (in Mandu couplet of Jahangir's coins), *Dirham-i-Sharai*, Aurangzeb's *Dam* and the heavy rupees of Shah Alam I.[2]. Gujarat Mahmudis were discussed by A. Master.[3]

Besides these, S. H. Hodivala brought out the literary material to the aid of the Mughal numismatics and showed a new field. He discussed a number of topics relating to Mughal numismatics in the light of literary material in a collection of essays entitled *Historical Studies in Mughal Numismatics*[4] and also in some of his stray articles.[5] Yet no serious notice has so far been taken of the historical aspects of the Mughal coins and their contribution to historical knowledge.

However, some of the numismatists realised the neceessity of bringing together the coins published from each mint. In this direction, G. P. Taylor took initiative and he published the coins of Ahmadabad,[6] Surat,[7] Junagarh,[8] and Cambay.[9] C. J. Brown brought the coins of Lucknow at one place.[10] But thereafter the enthusiasm in this direction appear to have ceased.

Along with these, during this period, no less than three Catalogues were published on Mughal coins: one in 1908 by H. N. Wright on the coins in the Indian Museum; the other in 1914 by R. B. Whitehead on the coins in the Lahore Museum and the third in 1920 by C. J. Brown on the coins in the Lucknow Museum. Thereafter, in 1939, Samsuddin Ahmad brought out a Supplementary Catalogue of the Indian

1. *NS*, XXVIII, p. 69; 73; 76; 78; 98; XXXI, p. 344; XXXIV, p. 190; XXXV, p. 31; XXXVII, 72; 75; 76; 77; XLII, p. 54.
2. *NS*, XXVII, p. 138; XXVII, p. 45; 62; 67; 80; XXXI, p. 339.
3. *NS*, XXIV, p. 463.
4. Numismatic Society of India, Memoir Series.
5. *NS*, XXVII, p. 139; XXXIV, 166; XXXV, p. 97; XXXVII, p. 64; XLI, p. 12; XLII, 57; 59; 68; 70.
6. *JBBRAS*, XX, p. 409.
7. *JBBRAS*, XXII, p. 245.
8. *NS*, XIX, p. 410.
9. *NS*, XXII, p. 178.
10. *NS*, XXV, p. 241.

Museum coins. A pamphlet-like supplementary list was also published of the coins of Lucknow Museum.

During all this period of Muslim domination in India, there were still some Hindu rulers, who had issued their own coins. But these coins have not drawn adequate attention of the scholars. We know that Mewar was issuing its own coins from the very early times. About them Cunningham has mentioned in the *Coins of Mediæval India*; but only recently we had two papers on some coins of this series. One is written by S. L. Katare[1] and the other by R. G. Tiwari.[2] The coins of Mithila found notice with the publication of the coins of Siva Simha by R. D. Banerji in 1913[3] but on them only recently Upendra Thakur wrote a paper.[4] Silver coins of Bhairava Simha have also come to light only recently. These coins were first published by K. K. Chaudhry as the coins of Ramabhadra,[5] then D. C. Sircar attributed them correctly.[6] Bengal also had some Hindu kings who issued their own coins. The coins of Mahendra Deva and Danujamardana Deva were first described by R. D. Banerji in 1911-12;[7] but details about them were brought out by H. E. Stapleton in 1930.[8] The coins of Assam, however, had drawn some attention of the scholars. Earliest attention was paid to these coins by E. A. Gait, who in 1875 published six coins of the Ahom rulers[9] and in 1895, 10 coins of Jaintia.[10] The same year G. A. Grierson published three coins, one of Raghunarayan, one of Koch dynasty and the third of Sharma-Manikyadeva of Tipparah.[11] In 1904, P. R. T. Gurdon published a coin of Siva Simha of the Ahom dynasty.[12] Then in 1909, J. Allan brought a detailed paper on the coins of Ahom dynasty[13] and in 1910, H. E. Stapleton described these coins in further detail.[14] A. W. Bothom wrote three papers, one on the coins of Kachari[15] other

1. *JNSI*, XVI, p. 284.
2. *JNSI* XVIII, p. 113.
3. *ASIAR*, 1913–14, p. 248.
4. *JNSI*, XIX, p. 198.
5. *JNSI*, XX, p. 55.
6. *JNSI*, XX, p. 192.
7. *ASIAR*, 1911-12, p. 167.
8. *NS*, XLIII, p. 5.
9. *JASB*, XLIV, p. 286.
10. *JASB*, LXIV, p. 286.
11. *PASB*, 1895, p. 85.
12. *NS*, IV, p. 113.
13. *NC*, IX, (4th Ser.), p. 300.
14. *JASB*, VI (N. S.), p. 619.
15. *NS*, XX, p. 556.

of Jayantia,[1] and the third on an Ahom coin dated Śaka 1570.[2] In 1913-14, R. D. Banerji described 10 coins of Tipparah[3] and in 1918 he published a coin from the Indian Museum and attributed it to Guru Govinda of Sylhet.[4] This coin was later shown by N K. Bhattashali to be the coin of Govinda Manikya of Tipparah.[5] Thereafter in 1935 Stapleton described the Countess Amhersty collection of Assamese coins.[6] A gold coin of Gaurinath Simha was brought to light in 1956[7] and lately A. Karim has published an interesting coin of this series.[8]

Lastly, it may be pointed out that through trade, coins of other countries had been coming to India during this period also ; and hoards of these coins are occasionally found. But unfortunately little attention is paid to them. So far as we are aware, only one hoard of such coins, which was found in 1882 in Bhroach and included the coins of Genoa, Venice, Egypt, Armenia and Persia, was published by O. Codrington.[9] Later, an Abbassid coin discovered during excavations at Paharpur was noticed by K. N. Dikshit.[10] Venician gold coins were found recently along with the coins of Gujarat Sultans but they have been ignored.[11]

To sum up the above resumé, it would not be wrong to ysa that whatever work has been done so far in the Medieval Indian numismatography, it is primarily confined to the bringing of coins into light. Little has been done to present them in the form of the source material for history. Most likely for this reason, the historians never took interest in this subject and the interest, in the absence of private coin-collectors, is fading day by day and hardly any new generation of numismatists is coming up to take up further work in this branch. It is therefore essential that we should pause for a while and assess the value of all the numismatic material that we have before us as material for history, and focus the attention of historians to their importance. Once the historians realise the value of the coins for their study, the medieval Indian numismatics is bound to take new turn.

1. *NS*, XXIV, p. 559.
2. Ibid., p. 457.
3. *ASI,AR*, 1913-14, p. 249.
4. *NS*, XXXII, p. 86.
5. *NS*, XXXVII, p. 47.
6. *NS*, XLVI, p 115.
7. *JNSI*, XVI, p. 260.
8. *JNSI*, XXII, p. 225.
9. *JBBRAS*, XV, p. 339.
10. *NS*, XLV, p. 75.
11. *JNSI*, XV, p. 223.

A SURVEY OF INDIAN NUMISMATOGRAPHY
(SOUTH INDIAN COINAGE)

P. L. GUPTA

The South Indian numismatography begins with W. Elliot, who published two papers in 1858 under the title "Numismatic Gleanings".[1] In the first paper, he described 112 coins, which included Punch-marked coins and the coins of the Sātavāhanas along with a few coins, which are now included under South Indian Coinage. In the second paper, he described the Puri-Kushana coins of Orissa and coins bearing the figure of boar and attributed them to the Chālukya dynasty. In 1883, G. Bidie described in a paper, which was later published in the form of a pamphlet, the coins called Pagoda or Varāha.[2] He classified them into twelve varieties, as Buddhist, Chālukya, Nolambavādi, Gajapati, Liṅgāyat, Vijayanagar, Gandīkota, Chitaldoorg, Travancore, E. I. Co., Adoni and Mysore. R. H. C. Tufnell, in 1885, wrote a paper describing 35 Fanams of his own collection, which were issued from Mysore, Calicut, Madura etc.[3] The same year, he wrote an important paper under the title *Hints to Coin-collectors in South India*.[4] This was republished in book form in 1889. It is more or less a resume of the South Indian numismatography till then. While this paper was still in press in 1886, W. Elliot came out with his book *Coins of Southern India* where he brought together in one place all his information about the South Indian coins. This book still holds the field as the main source of our knowledge about this coinage, though it has become obsolete in many respects. In 1882, J. Gibbs published a Rāmatanki[5] and later submitted a paper on the Rāmatanks, where he described 13 of them and suggested that they were issued by the Svāmīs of different temples of South India for the worship of the gods in their respective shrines.[6] The other paper on South Indian coinage was published in 1887-88 by J. E. Tracy under the title *Pāndyan Coins*, where he described 15 copper coins found in Madura

1. *Madras Journal of Literature and Science*, 1858, p. 220; 1859, p. 70.
2. *PASB*, 1882, p. 141.
3. *JASB*, LV, p. 157.
4. *MJLS*, 1886-87, p. 33.
5. *PASB*, 1882, p. 47.
6. *JASB*, LIII, p. 207.

district.[1] A booklet entitled *Coins of Tinnevelly* by E. Loventhol is another important contribution of the nineteenth century to the South Indian numismatography.

During the twentieth century, the South Indian numismatography drew the attention of Indian numismatists; yet not much has been done in this direction. R. S. R. Ayangar, is one, who took up the South Indian numismatography seriously in the twenties and contributed nine papers[2] in which he described the coins of some of the South Indian dynasties, e. g, the Cholas, Chālukyas, Yādavas and Vijayanagar. Most of these papers deal with the coins found as treasure trove and furnish interesting information. Towards the end of the twenties and in the years of thirtees, M. H. Krishna published nine papers,[3] where he dealt exhaustively with the coins of the Hoyaśālas, Western and Eastern Chālukyas, Cholas. Pāndyas, Western Gaṅgas, Pallavas, and the Vijayanagar. These papers, originally forming part of the author's thesis submitted to the London University, serve as a corpus, though they leave much to be desired. Then we have T. Desikachari, who worked for the South Indian numismatics, and brought out three important books based on the coins in his own and his friends' collections. They are: (1) *South Indian Epigraphy and Numismatics*, published in 1916;[4] (2) *South Indian Coins*, published in 1933[5] and (3) *Dravidian Coins—The Pandyas and Cholas and Their Coinage*.[6] These books contain much useful material but, unfortunately, they are little known.

Besides these numismatists, there are a number of other scholars, who have written about the South Indian coinage, but their contributions are mostly confined to one or two articles and are meant just to bring out a few unpublished coins. D. R. Bhandarkar brought to light the coins of Jagadekkamalla of the Western Chālukya dynasty of Kalyani.[7] J. F. Fleet described six coins of the Eastern Chālukya kings Śaktivarman and Rāja Rājā II.[8] R. Sreenivas brought to

1. *MJLS*, 1887-88, p. 138.
2. *POC*, 1924, p. 82; 1928, p. 464; *NS*, XXXIX, p 8; 32; 35; *JAHS*, I, p. 132; 137; 190; *JIH*, VIII, p. 353.
3. *Annual Report of Mysore Archæological Department*, 1929, p. 23; 1930, p. 68; 1931, p. 69; 1933, p. 98; 1934, p. 58; 1937, p. 74; 1939, p 97; 1940, p. 75; 1941, p 108.
4. Printed at Addison Press, Madras.
5. Printed at St. Joseph's Industrial School Press, Trichnapoly.
6. Printed by Jagem & Co., Ltd., Trichnapoly.
7. *JBBRAS*, XXI, p. 66.
8. *IA*, XIX, p. 179.

light silver coins of Western Chālukyas and the coins of Viśamasiddhi, the first king of the Eastern Chālukya dynasty.[1] N. L. Rao published the coins of Vīra Kerala.[2] A new type of Padmataṅka, with the legend *Sri Lakshumā*, are brought to light by G. H. Khare.[3] He has attributed these coins to Lakshmī-Devi, the chief queen of Chālukya Vikramāditya VI. A. S. Altekar has, however, expressed his opinion that these coins are the Padmataṅkas of Rāmataṅka variety and bear the name of Rāmāyaṇa heroes instead of their effigies. M. G. Dikshit described the gold coins of the Kadambas of Goa.[4] He has also attributed some tiny coins to the Śilāhāras of Kolhapur.[5] The author of these lines has brought to light the gold coins of Barm Bhupala[6]—a little known ruler, and also some tiny gold coins of a peculiar shape with Canarese legends *Arasa Bhava, -trahi Macha*, etc. and some tiny gold coins of unknown types and thinks them to be Chālukyan.[7] A. S. Altekar[8] and B. N. Nath[9] have written on the Yādava coins; but by far, Vijayanagar coins have engaged the attention of a larger number of scholars viz. E. Hulztch,[10] H. Heras,[11] C. H. Biddulph,[12] V. V. Mirashi,[13] K. D. Swaminathan.[14] Kākatīya coins have recently come into prominence. S. T. S. Gopalachari,[15] after surveying all that had been said about the Kākatiya coins, expressed his opinion that no coin can be positively ascribed to Kākatīya dynasty. D. C. Sircar has discussed the copper coins, which were published by Dinkar Rao as the coins of Rāshtrakūṭa king Karkka II,[16] and ascribed them to Rudradeva of Kākatīya dynasty.[17] A similar coin has also been published by I. Madhavan[18] and S. Ramayya as Kākatīya coins.[19]

1. *RAIDN*, 1925-26, p. 16, 21.
2. *JNSI*, IX, p. 97.
3. *JNSI*, III, p 53.
4. *JNSI*, X, 143; XI, p. 88.
5. *JNSI*, XIV, p. 15.
6. *JNSI*, XX, p. 80.
7. *JNSI*, XX, 78.
8. *JNSI*, VIII, p 147.
9. *JNSI*, XIII, p. 92; XVII, p. 58.
10. *IA*, XX p. 301.
11. *NS*, XLIV, p 13; *JIH*, VII, p. 34.
12. *JNSI*, XX, p. 82; XXII, p. 202.
13. *JNSI*, XVII, p. 99.
14. *JNSI*, XIX, p. 32; XXII, p. 277.
15. *JAHS*, VI, p. 190.
16. *JNSI*, XXI, p. 37.
17. *JNSI*, XXI, p. 137.
18. *Hindu* (Madras), dated 28th June 1959.
19. *JNSI*, XXI, p. 181.

J. G. Da Cunha has attempted to trace out the history of Fanams and their varieties.[1]

A systematic study of this branch of Indian numismatics is most essential; but unfortunately, hardly any scholar seems to be coming to this field.

1. *JASB*, II, p. 155.

A SURVEY OF INDIAN NUMISMATOGRAPHY

(Coinage from the Decline of the Mughal Empire to 1947)

P. L. GUPTA

The influence of the Mughals began to decline during the last days of Aurangzeb, when the Marāthās rose to power, the European Trading Companies began to exert their influence in the political life of India and the governors and the administrators began to take more and more liberty. All these growing powers, soon began to mint their own coins, without any authority from the Mughal Government at the centre. Yet, in their earlier stages, each new power preferred to strike coins in the name of the regnant emperor and imitate the royal issue. Most of the coins thus issued appear to be similar to the Imperial Mughal coins.

The early numismatists took all these coins upto the time of Shah Alam II as Mughal issues; they felt doubts only about some coins issued in the name of Shah Alam II. To these coins S. Lane-Poole gave some attention and realised that a large number of them were the issues of the quasi-independent States; but he thought it proper to include all those coins in his *Catalogue of the Mughal Coins in the British Museum* which showed the emperor's name and on which the date tallied with his reign.[1] However, he did not follow this in the case of the coins issued from the Banaras Mint. H. Nelson Wright also followed the same principle in his Mughal Calalogue with this modification that he excluded those coins which he thought to be the issues of East India Company.

The matter was discussed by the Coin Conference held at Allahabad in December 1910. There, R. B. Whitehead suggested that those coins should be classed as Imperial issues which conform to the following criteria :

(a) They should be of the Imperial type and bear legible inscriptions;

(b) They should have legible mints and their regnal and Hijri dates should be in accord;

(c) Local mint marks, devices and symbols should be absent.

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1. *BMC, ME*, Intro., p. cviii.

It was also pointed out that there are other features also which should be scrutinised. Thus, if the fabric and workmanship of a coin were clumsy and crude, it would be an evidence of non-Imperial origin. A coin with a collar, rim or milled edge may with confidence be assigned to the East India Company. Inquiries should also be made whether history supplies corroborative evidence of a Mughal emperor having exercised direct control over the locality from which the coin was issued.

But then, it was pointed out, a decision on these lines would mean that each coin be taken on its merit; and in the end the numismatists would probably differ in their opinions. So, it would be impossible to reconcile individual preference even if it were possible in every case to obtain the requisite information. The Conference therefore decided that all those coins that bear the names of the Mughal emperors and were struck upto and including the year 1218 A. H. (1803 A. D.)—the date of the British occupation of the capital Delhi, should be included in Mughal Catalogues. It was further decided that as this date is close to the end of the reign of Shah Alam II and as many issues bearing the name of this emperor proceed unchanged till the end of his reign, they should be regarded as Mughal during the period intervening between the year 1803 A.D. and the date of the death of Shah Alam II Only those coins of Muhammad Akbar and Bahadur Shah II should be deemed Mughal, which were struck at Shahjahanabad."

This decision of the Coin Committee has since been honoured by the numismatists and they took as Imperial issues even those coins that could easily be detected as non-Imperial Mughal issues and identified with some local issuing authority. As a result, the numismatists and coin-collectors interested in modern Indian coins showed their indifference towards these issues, and failed to recognise their independent status. For this very reason, even the post-Shah Alam II coins did not find proper attention; and thus much information that could have been easily available is now almost lost. R. G. Gyani tried to draw the attention to this neglected state by presenting a paper before the All-India Oriental Conference, where he pointed out the non-Imperial nature of most of the mints issuing coins in Shah Alam's name. But unfortunately only the summary of the paper appeared in the Report of the Conference[1] and the paper did not find any publicity. So, a great majority of coins, in this manner,

1. *POC*, Baroda, p. 725.

are being taken as Mughal and no attempt is made to study them in their proper set-up and build up a sound history of the non-Mughal coinage. A welcome effort in this direction has been recently made by C. H. Biddulph, who has tried to distinguish the coins of the English, French and the Karnatak Nawabs from those of the Mughals, issued in the South.[1] Similar attempts are necessary to deal with the coins of almost all the so-called mints of the Mughals.

Our source of information about the local coinage, that cropped up with the gradual fall of the Mughals, till the publication of the fourth volume of the *Catalogue of the Coins in Indian Museum* in 1928, had chiefly been "The Useful Table" published by J. Princep in 1834,[2] where he gave some information about the local coins then current. In between this period, we have a laudable attempt by W.H. Valentine. In 1914, he proposed to bring at one place all that he knew about the copper coins of India, published and unpublished. In two volumes, thus, came the coins of Bengal, U.P. and the Punjab. He intended to bring out the coins of Bombay, Rajputana, Central India, Madras and South India in subsequent volumes, but he could not. In the two published ones, he has described the copper coins beginning with the Early Sultanate period down to his own time. Thus it is a mine of information on the copper coinage and a valuable source for the study of the modern coins, which are nowhere else described.

We do not, however, say that altogether no other work has been done in the field; what we mean to stress is that what has been done is too little. Such sporadic works may he reviewed by dividing them into four sections or groups: (i) issues of those units that were known as native States during the British period, excluding Punjab; (ii) issues of the Durranis, who occupied Punjab after snatching it from the Mughals and their successor Sikhs; (iii) issues of the Nawabs of the Awadh; and (iv) coins of the European Trading Companies and the British administration in India.

Reviewing the first group, it would not be out of place to point out that acco.ding to an India Office list of 1917, there were about a hundred native States, and nearly all of them claimed the right of striking their own coins, when they adhered to the British administration. So, the numis-

1. *JNSI*, XXI, p. 146; XXII, p. 229.
2. *JASB*, 1834.

matography of this period lies in the study of the coinage of no less than one hundred States, which were issuing coins from the time of one or the other Mughal ruler. During the early British period, the right of minting coins was conceded only to thirty-four States, who could vindicate their claim. In 1876, the India Government passed an Act by which they offered to strike, free of charge, coins for the native States, if the metal was supplied for the purpose to the Government Mints. But out of thirty-four States, only Alwar and Bikaner accepted the conditions of the Act before its expiry in 1893. The privilege of coining was consequently withdrawn from most of the States. It were only Hyderabad, Udaipur, Jaipur, Tonk, Orchha and Travancore, who issued their coins in silver and copper; Cutch, Jaisalmer and Kishangarh issued in silver only, and Gwalior, Ratlam and Baroda only in copper.

Modern issues of these States, find mention in some way or the other, in the catalogues, dealing with modern coins; but there too, they are seldom fully described. So far as we are aware, it is only Cutch, whose modern coins are fully published in a small book entitled *The Modern Coinage of Cutch*, by William L. Clark.[1] Earlier coins of Cutch and Kathiawar were described by O. Codrington in two papers;[2] in one he described 21 coins and in the other 27 coins, giving short history of the dynasty and the types of coins issued by various rulers. A few coins of Porbunder and Radhanpur were published by B. L. Mankad from the Watson Museum[3] G. P. Taylor published an interesting article about Hatkesvara Kouis of Junagarh.[4] He also brought to light the coinage of the last six Baroda rulers, Anand Rao, Sayaji Rao II, Ganapat Rao, Khande Rao, Malhar Rao and Sayaji Rao III.[5] Some unpublished coins of all these rulers were later brought to light by R G. Gyani.[6] Recently, B. L. Mankad discovered the coins of Manaji in the Baroda Museum[7] R G. Gyani surveyed the coinage of the Nizams of Hyderabad and published 15 typical coins of the dynasty.[8] Thereafter, Hurmuz Kaus, P. S. Tarapore and Dinkar Rao published some coins which were not

1. Published from Chicago.
2. *JBBRAS*, XVII, p. 49; *NC*, XV (3rd Ser.), p. 59.
3. *JNSI*, VIII, p. 155.
4. *NS*, XX, p. 537.
5. *NS*, XVIII, p. 229.
6. *NS*, XLIV, p. 27.
7. *JNSI*, XXII, p. 285.
8. *NS*, XLVI, p. 99.

noticed earlier.[1] The South Indian coins formed the subject of a paper by R. P. Jackson,[2] who also published a paper on Carnatic coins.[3] The coinage of Mysore has received the attention of a number of scholars. H. P. Hawks published a book entitled *Coins of Mysore* as early as 1856. R. H. C. Tufnell mentioned them in his *Hints to Coin Collectors in Southern India*. In 1888, E. Thurston published the *Catalogue of the Mysore Coins in the Madras Museum*. In 1909, R. P. Jackson wrote an article 'Coin Collection Mysore'.[4] Then in 1921, J. R. Henderson brought out a Monograph entitled *The Coins of Haider Ali and Tipu Sultan*.[5] In 1957, P. B. Ramachandra Rao brought out a booklet entitled *The Story of the Indian Coinage*,[6] three of the five chapters of which are devoted to the discussion of the coinage of Mysore. The appendices also relate to Mysore coinage. Lately, C. H. Biddulph has discussed some of the Mysore coins.[7] Coinage of Janjira is the subject of one of the papers by G. S. Gyani.[8]

Coming to Central India, we have a paper from G. S. Gyani on some coins of the Sindhias of Gwalior.[9] The coins of Dewas are described by H. N. Wright.[10] In a small note, H. V. Trivedi has mentioned a copper pattern of three anna coin.[11] R. Burn has described and illustrated seven silver coins of Bajaranggarh.[12]

W. W. Webb described the coins of Mewar, Partabgarh, Dungarpur, Banswara, Marwar, Bikaner, Kishangarh, Jaipur, Bundi, Kotah, Jhalawar, Jaisalmer, Alwar, Karauli, Bharatpur and Dholpur in a book entitled *The Currencies of Rajputana*, which was published in 1893. Though the book was not written from a numismatist's point of view, it serves the purpose well and is the only book on the subject to help the coin-collectors. A small book entitled *Coins of Marwar* was compiled by B. N. Reu in 1946 and is a model on

1. *JNSI*, V, 164; IX, p. 128; XXII, p. 249 etc.
2. *British Numismatic Journal*, 1913.
3. *NC*, X (4th Ser.), p. 146.
4. *British Numismatic Journal*, 1909.
5. Memoire of the Numismatic Society of India.
6. Published by Banglore Printing and Publishing Co. Ltd., Banglore.
7. *JNSI*, XX, p. 84.
8. *NS*, XLV, p. 71.
9. *JNSI*, I, p. 72.
10. *NS*, IV, p. 114.
11. *JNSI*, XV, p. 239.
12. *JASB*, LXVI p. 275

which the coinage of native States may be brought together. Besides these, we have only three articles, which describe some stray coins of some of the native States of Rajasthan. R. M. Antani described the coins of Jhalawar, Jaipur, and Jodhpur mints in 1927;[1] thereafter P. Thorburn published the coins of Dholpur, Bundi, Jodhpur and Manipur.[2] The third note was written by W. Vost, who referred to the coins of Jhalawar.[3]

The coins of the Durrani rulers of the Punjab were first described by M. Longworth Dames in two papers ;[4] then C. J. Rodgers described the coins of Ahmad Shah Durrani.[5] His Catalogue of the Punjab Museum records a number of coins of the rulers of this dynasty. Thereafter, Whitehead published a paper in 1908, where he described some new and interesting gold and silver issues of the Durranis, from the Bhawalpur State Toshakhana.[6] In 1936, he published his most important work on the Durrani coinage i.e. the third volume of the *Catalogue of the Coins in the Punjab Museum,* where not only he described the coins in the Punjab Museum but also those from other sources. In an introduction, he discussed the history of the dynasty and the problems of their coinage. Soon after, he had an occassion to see the collections of the American Numismatic Society and of P. Thorburn, and he put together in a paper[7] those coins that he found interesting and worthy of notice. Before the publication of Whitehead's *Catalogue,* the only paper that was ever written after 1908 was one from Jagat Prasad, who described in 1915 a gold coin of Taimur Shah of Bhakkhr mint, which was not known till then.[8] Even after the publication of the *Catalogue,* not much has come out. We have a paper from M. K Thakore, where he has discussed the Ahmadabad coins of Nadir Shah from Ahmadabad mint on the evidence of Mirat-i-Ahmadi.[9] The author of these lines contributed a paper, where he has described 19 gold coins issued by Ahmad Shah, Taimur Shah and Mahmud Shah.[10] Some of the coins of Mahmud Shah are quite unknown in earlier works.

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1. *NS*, XL, p. 3.
2. *NS*, XLII, p. 23.
3. *NS*, II, p. 17.
4. *PASB*, 1883, p. 96 ; *NC*, VIII (3rd Ser.), p. 325.
5. *JASB*, LIV, p. 67.
6. *NS*, XI, p. 331.
7. *NS*, XLVI, p. 107.
8. *NS*, XXVI, 497.
9. *JNSI*, IX, p. 120.
10. *JNSI*, X, p. 55.

The coinage of the Sikhs, who more or less succeeded the Durranis in the Punjab, was described earliest by C J. Rodgers in 1881, where after a brief political history of the Sikhs, their coin legends and mints are described.[1] Thereafter, in another paper he described the coins of Ranjit Deo, the king of Jammu.[2] W. Irvine wrote about the Patiala coins in 1898.[3] Lastly we have a paper from R. C. Temple on the coins of modern native Chiefs of the Punjab, where he has dealt with the coins of Patiala, Nabha, Jind, Kaithal, and Malerkotla.[4] That is all we have till now on the coinage of the Punjab.

The coinage of Awadh does not seem to have attracted the numismatists of nineteenth century. The only notice in that period is about the commemorative medal of Ghaziuddin Haider by H. H. Wilson in 1842.[5] Thereafter two other notes were subscribed on this medal; one by H. N. Wright in 1904[6] and the other by R. Burn in 1941.[7] The coinage of the Awadh rulers finds mention first only in 1912, when C. J. Brown wrote a paper about it and described in detail the legends and types of the coins issued by various rulers of this kingdom.[8] Prayag Dayal in 1935 brought out the *Catalogue of the Awadh Coins in the Lucknow Museum*, which is the only exhaustive work on the subject and serves as reference. On the basis of his studies of the Lucknow Museum coins, he published about the same time a separate note on some unpublished marks.[9] After that we have only two notes on this coinage, both written in 1943. In one, K C. Nigam has drawn attention to the fact that Ghaziuddin Haider had issued three varieties of coins in 1234 A.H. and has discussed their order of issue and the historical implications.[10] In the other paper, V. S. Agrawala has described a hoard of Awadh coins found in Sultanpur district.[11] It contained four varieties of this coinage. The author has drawn the attention to their being issues of different authorities.

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1. *JASB*, L, p. 71.
2. *JASB*, LIV, p. 60.
3. *PASB*, 1898, p. 133.
4. *IA*, XVIII, p. 321.
5. *NC*, V, p 129.
6. *NS*, I, p. 11.
7. *JNSI*, III, p. 113.
8. *NS*, XVIII, p. 249.
9. *NS*, XLVI, p. 113.
10. *JNSI*, V, p. 105.
11. *JNSI*, V, p. 107.

Now coming to the coinage of the European Trading Companies, who in course of time wielded power in some part or the other and issued their own coins, we face the same difficulty. Not much attention has been given even to these coins. In case of the coinage of the French and the Dutch, hardly anything has been written in this country. We find only a chapter about each of these in Desikachari's book *South Indian Coins*. In Europe also we have not much literature. Indo-French coins have found attention only of E. Zay, in his book *Histoire Monetaire des Colonies Francaise*, which was published in 1892. Recently, C H. Biddulph has published a paper on a coin of Shah Jahan III of Surat mint dated in his first regnal year. It is countermarked with letters C.F. within an oval. The author believes that the letters stand for *Colonies Francaises* and it was counterstruck by the French authorities.[1] As regards the Dutch coinage, our source of information is solely confined to a book published only in 1953 by C. Scholten, entitled *The Coins of the Dutch Overseas Territories*. This was earlier published in 1950 in Dutch. The book deals, in its chapter X, with the coins of the Dutch United East India Company in India and Ceylon and describes the coins issued from Pulicate, Nagapatem, Masulipatem, Pondicherry, Cochin, Tuticorin and Ceylon. Recently, C. H. Biddulph has published some counterstruck coins of the Dutch East India Company and their brockages.[2]

The Danish coins of India, which were issued from a little known small territory of Trunquebar, has got comparatively more attention from the numismatists. In India, Desikachari and Rangachari jointly contributed a paper on this coinage first in 1888-89[3] and then again in 1896[4]. They have also included a chapter on this coinage in their book *South Indian Coins*. In 1894, E. Hultzsch wrote a paper about the Indo-Danish coins and described 32 of them.[5] Later, in 1934, H. Heras described some coins of this series with all relevent information.[6] Amongst the European publications, the Indian numismatists seem to be aware only of the Sale-Catalogue of the collection of H. T. Grogan, which has described the Indo-Danish coins of the collection with two plates. But there is another book on the subject entitled *Tankebar Monter* by Vilhelm Bergsoe. Latest work on the

1. *JNSI*, XX, p. 83.
2. *JNSI* XXII, p. 291-92.
3. *MJLS*, 1888-89, p. 69.
4. *IA*, XXIV, p. 22.
5. *IA*, XXII, p. 116.
6. *NS*, XLV, p. 79.

subject is a book entitled the same as above by J. C. Holm which was published in 1956 from Copenhagen.

As regards the Indo-Portuguese coins, the earliest attempt was made by J. G. Da Cunha, who contributed four articles under the title "Contributions to the Study of Indo-Portuguese Numismatics."[1] In 1880, A. C. Teixeira de Aragao wrote about the Indo-Portuguese coinage in the *Descripteao geral e historia das moedas cunhadas en nomo dos Reis, Regentes e Governadores da Portugal*, volume III, published from Libson. Then E. Thurston published a catalogue of the coins of Madras Government Museum in 1894, where he included Indo-Portuguese coins along with the Roman and Ceylon coins. But this is no more than a list. An exhaustive work on the subject was published in 1901 by Manul Joakuim de Compos under the title *Numismatica Indo-Portuguesa*. Thereafter, we have a valuable series of articles from H. T. Grogan on the silver and gold coins of Goa and the silver issues of Diu in the *Numismatic Circular* (London). A paper on the silver issues of Diu mint was also published by B. A. Fernandes in 1941; but it contains nothing more than what Grogan had written in his paper. After this, nothing seems to have been done in the field either in India or in Portugal or anywhere else; for we find that the sale-catalogue of H. T. Grogan's collection, published by Shulmann in 1914, is even today looked as a source of information on the Indo-Portuguese coins and is in so much demand that the auctioneers of that collection thought it worthwhile to reprint the portion of the sale-catalogue relating to Indo-Portuguese coins only a few years back. However, it seems that the new generation of the numismatists in Portugal has begun to take interest in their colonial coins. We find now and then small notes on the Indo-Portuguese coins in the *Nummus*, a Portuguese Journal of Numismatics, from the pen of Joaquim Fronteira. But how much work in the field has been done in Portugal cannot be estimated as information about them is lacking in India. It is necessary that a survey be made in this direction and a hand-book of Indo-Portuguese numismatics be published to arouse interest in the subject in India.

Earliest available notice of the coinage of the British, issued in India, is from the pen of E. Thomas.[2] He contributed a paper in 1882 on the coinage of the East India Company of Bombay under the Charters of Charles II.[3]

1. *JBBRAS*, XIV, p. 267; 402; XV, p. 169; XVI, p. 17.
2. *JNSI*, III, p. 115.
3. *IA*, XI, p. 313.

The same paper with some elaboration was republished next year.[1] Then we have the most informative work on the subject from the pen of E. Thurston, who published in 1889 the *History of the Coinage of the Territories of the East India Company in the Indian Peninsula*. This is based on the records that were then available with the Madras mint. Later he published an article entitled "Note on the history of the East India Co. Coinage from 1753 to 1853" based on the records available with the Calcutta mint.[2] A similar work on the basis of the records in the Bombay mint, would have been equally valuable. Thurston desired of such work being published ; but so far nothing has come out. The author of these lines tried to find out if any old records are still available with the Bombay mint, but was disappointed to know that there was hardly any.

In 1889, J Atkins brought out a big volume entitled *Coins and Tokens of the Possessions and Colonies of British Empire*. Here with a brief introduction, he has listed all the coins that he knew of Madras, Bombay and Bengal, and it is a valuable reference work. In 1899, A. Westcott published two papers on the copper coins of Madras presidency,[3] which give valuable information, but much of their utility is lost as the coins are not illustrated.

Thereafter, we have only a few articles on the Indo-British coins, that were published at long intervals. in 1903, J. M. C. Johnston contributed a paper entitled "Coinage of the East India Company", showing the distinctions between the coins issued by E. I Co., and the Mughal and local authorities.[4] He also described various coins issued from Murshidabad, Banaras, Farukhabad, Surat and Masulipatam. Then in 1912, E. V. Zambaur contributed a small note on a coin, which he considered the earliest British issue of Murshidabad mint[5] In 1921, C E. Kotwal brought to notice a half rupee of Charles II of Bombay.[6] Then for about thirty years, we hear nothing about the Indo-English coins from the pen of numismatists. In 1949, we find again a note from S. C. Upadhyaya on the Copper coins of Bombay Mint (1659-1677).[7] In 1955, K. R Vijayaraghavan wrote a note on the Old Star Pagodas of Madras and from documents, tried

1. *NC*, 1883, p. 40.
2. *JASB*, LXII, p. 52.
3. *IA*, XXVIII, p. 270 ; XXIX, p. 172.
4. *NC*, III (4th Ser.), p. 71.
5. *NS*, XXI, p. 483.
6. *NS*, XXXV, p. 17.
7. *JNSI*, XI, p. 39.

to notice the probable dates of their issue.[1] During the years 1956-58, E. Wodak wrote three interesting and informative articles. One related to the Bale Marks of the East India Company that is found on the coins;[2] the second dealt with the rupees dated 1862,[3] which were issued over a number of years and have some distinguishing dots for the different years of their issue; and the third describes those coins which James Prinsep has issued on behalf of the East India Company from Phulta mint[4]. A small note on the modern Indian monetary system was contributed by H. A. Cahn in German.[5] Then we have the interesting article of C. H. Biddulph, published in 1959[6], where he has analysed the coins of various mints of the south and attempted to distinguish from amongst them those that were issued by the East India Company, French and the Nawabs of Arcot. In 1960, we have from him an interesting note, in which he has brought to light some copper coins that were issued by the British at Kandahar.[7] Some silver coins of the Mughal pattern issued by the East India Company from Pombay in the name of the British sovereign King William III and Queen may have been described by the author of this note.[8]

The Indo-British coins that were being issued after 1835, from year to year, from the mints at Madras, Calcutta and Bombay, had been regularly announced in small notes in the columns of *Numismatic Chronicle* and furnish at times very useful information. These coins are also found briefly noticed in the Catalogues and books that are published for the use of coin-collectors by various publishers and coin-dealers. But recently, two good books, one by H. W. Linecar entitled *British Commonwealth Coins* and the other by L.V.W. Wright entitled *Colonial and Commonwealth Coins*, have come out, which contain some useful material about the modern Indian coins.

Some of the English issues of India, were countermarked by other authorities for currency in their own territories. Such coins are also interesting from the point of view of Indian numismatics; but it seems nothing has been done

1. *JNSI*, XVII, p. 109.
2. *The South Australian Numismatic Journal*, Vol. 7. No. 2, p. 9.
3. Ibid., Vol. 8, No. 2, p. 12.
4. *Num. Cir.*, Vol. 66, No. 2, p. 36; No. 3, p. 61.
5. *Schweizer Munzblatter*, No. 34, p. 52.
6. *JNSI*, XXI, p. 146.
7. *JNSI*, XXII, p. 289
8. *JNSI* XXI, p. 174.

in this direction. Recently, two papers, touching this branch of numismatics, have come out. One, written by F. Pridmore, was published in 1959.[1] It refers to certain silver rupees and quarter rupees of Madras, which were countermarked for use in Ceylon. The other paper is by the author of this note and refers to a countermarked coin of Queen Victoria.[2]

Patterns of coins, that are prepared by the mints for final selection of an issue, rarely come to the notice of the numismatists and coin-collectors. Yet, they are valuable material for a numismatist. Unfortunately, no attention has been paid in this direction. Recently, H. Linecar published a paper on some Indian patterns, which were prepared during last twenty-five or thirty years.[3]

Coin-weights are another sub-branch of numismatics. They have recently found the attention of C. H. Biddulph, who has published two notes on them.[4]

Lastly, in a paper, this author has dealt with the antiquity of the coin Anna.[5]

On the whole, what has been done in the field of modern Indian numismatography, is far from satisfactory. It is necessary that the Government of India and their mints should take an active interest in enlivening the interest in modern Indian numismatics by publishing adequate informations about their issues and activities. National archives should also take steps to release the interesting material on the coinage and currency of this country, that is now lying buried in the files deposited in it. At the same time, it is also essential that the museums and the coin-collectors should come forward and bring to light the material they have in their collection.

1. *Num. Cir.*, Vol. 67, No. 10, p. 178.
2. *JNSI*, XX, p. 231.
3. *Num. Cir.*, Vol. 64, No. 6, Col. 263.
4. *JNSI*, XXI, p. 179 ; XXII, p. 293.
5. *JNSI*, XX, p. 214.

INDO-BRITISH COINS SINCE 1835

A. N. LAHIRI

The epoch-making reform of the British Indian coinage took place in 1835 on the recommendation of James Prinsep,[1] the father of Indian palæography and numismatics. Weight, size and fineness of the coins of all metals and denominations were standardized[2] in that year. The *tolā* of 180 grains became the standard unit of weight for coining and other purposes. Thus, the mohar in gold, the rupee in silver and the quarter-anna in copper were all struck in a uniform weight-standard. The types, of course, were different on coins of different metals.[3]

We propose in this paper to make a somewhat detailed chronological study of 112 years' minting activities in India from the days of King William IV to those of King George VI, or precisely from 1835 to 1947, the year of Indian Independence. During these years, the rupee, India's standard monetary unit, gained an international popularity, so much so that rupee coins had been (and are being) struck in places far away from India.[4]

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1. James Prinsep (1799–1840), earlier the Master of the Benares Mint, was then the Assay Master of the Calcutta Mint. He was also the Secretary of the Asiatic Society of Bengal and started the world-famous journal of the Society. He made a pioneer and the first scientific study of Indian coins, both ancient and modern. He has become immortal by deciphering most of the letters of the Brāhmī and Kharoshthī alphabets.

2. Previously there were numerous series of coins of different weights, sizes and fineness, the position being chaotic.

3. "...So as to fully distinguish them from one another, and prevent fraud and imposition by gilding or silvering". —*JASB*, 1893, p. 82. Cf. List of Coins (Appendix) : Types Nos. 1, 3 and 6. Henceforth Type numbers will be given in bracklets.

4. See the author's paper, "Rupee Coins Abroad", *JNSI*, XIX, pp. 59–70 and Plates V–VI. Rupee coins with the lower denominations were (and are still in some cases) struck in Afghanistan, Burma, German East Africa, Italian Somaliland, Java, Mauritius, Mombasa, Nepal, Pakistan, Portuguese India, Seychilles and Tibet.

William IV (1765-1837)

William IV was the third son of King George III. He ascended the throne of the United Kingdom of Great Britain and Ireland on 26 June 1830 in succession to his brother George IV. He had very little to do with the actual government of Indian territories, the Board of Directors of the East India Company exercising real power. Coins in India were, of course, struck in the name of King William IV, under the auspices of the East India Company. It was, however, during the reign of William IV that the Indian currency saw its most remarkable reform. King William IV died on 20 June 1837.

Coins were minted in the three usual metals—gold, silver and copper. The denominations were: the double and single mohars in gold, the full, half and quarter rupee in silver, and the half, quarter and one-twelfth anna piece in copper. Gold and silver coins of all denominations had straight milling, while the copper pieces were unmilled.[1] Coins of all metals bore the date 1835, though struck between the years 1835 and 1839.[2]

There were different designs for coins of different metals. While the obverse of both gold and silver coins bore the 'effigy of the king,' that of the copper coins depicted the Company's 'Coat-of-Arms'; on the other hand, the reverse of the gold coins had the figure of 'lion' and that of both silver and copper coins bore a 'laurel wreath.'[3]

The head of the king is depicted as facing *right* in consonance with the British custom, according to which the royal effigy on coins changes sides with each reign.[4] The royal head does not wear a crown, again in conformity with

1. Straight milling seems to have been introduced in the Company's Muslim-type gold and silver coins in about 1818. See S. Lane-Poole, *BMC* (*Mughal Coins*), p ciii.
2. The same dies, with the date 1835 unaltered, were used for striking coins until 1840, when the dies with the date 1840 replaced them.
3. Composed of two clusters interlaced at the bottom.
4. Thus, while the head of William IV is to the *right*, that of Victoria is to the *left*, and so on. There is, however, nothing abnormal in the apparent anomaly in the depiction of the bust of George VI which faces *left* like that of George V; this is because of the fact he was preceded by Edward VII, whose coins, if struck, would bear the bust facing *right*.

the custom then prevailing in the realms of the British Empire.[1]

The Company's Coat-of-Arms, as seen on the obverse of copper coins, consisted of (as on the previous Bombay and Madras copper issues)[2] a crossed shield with two supporting lions on the left and right and a crest-lion on the top, flanked by two Union Jacks; a scroll placed below the shield bore the Company's motto in Latin—AUSP : REG : SEN : ANG.[3]

The reverse of the gold coins bore the figure of the Lion, 'an appropriate type of sovereignty', 'completely localised by the ever-flourishing Palm, an Asiatic though ancient tasteful emblem of perpetuity.'[4] The reverse of the silver and copper coins had in the centre the value of the respective denominations in English and Persian, encircled by a 'laurel wreath' above which was the legend: EAST INDIA COMPANY.

Gold and silver coins bore on the obverse the king's name and epithet: WILLIAM IIII, KING. Copper coins (begin without the royal portrait) did not bear his name.

Victoria (1819-1901)

Daughter of the Duke of Kent, Victoria came to the throne on 20 June 1837 on the death of her uncle William IV, and was crowned in the following year. Three series of coins were minted in India during her long reign of about 64 years.[5] Queen Victoria died on 22 January 1901.

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1. Upto the time of William IV, neither the coins of Great Britain nor those of any of the British colonies bore the 'crowned bust' of the issuing monarch. Colonial coins began to bear the crowned effigies of the British sovereigns from the time of Victoria. But, of the coins of Great Britain, a few issues alone of Victoria perhaps show the royal effigy as 'crowned'; these are the coins of the Gothic style and those struck to commemorate Victoria's Jubilee.
2. This Coat-of-Arms seems to have been first used on the Bombay issues of 1804.
3. AUSPICIO REGIS ET SENATUS ANGLIE (Auspicious Reign and English Senate or Council).
4. These are the actual wordings of James Prinsep, who recommended the Lion-and-Palm type. See *JASB*, 1893, p. 78.
5. The Company's political power ceased on 1 November 1858 when Victoria was proclaimed 'Queen of Great Britain and the Colonies' and the Government of India was transferred to the 'Crown', under a Council of State. But so far as the coins of India were concerned, they did

The First Series of Victoria's coins (1840-1861)[1] were also issued under the auspices of the East India Company and followed the pattern of the William IV coinage. The types were : *Bust and Lion* for gold, *Bust and Wreath* for silver and *Coat-of-Arms and Wreath* for copper. There were two varieties with regard to the depiction of the Queen's head on both gold and silver coins. Coins of the first variety have a *slightly* broader flan and the Queen's somewhat elongated head with the legend—VICTORIA QUEEN—written continuously, while of the second variety have the normal-sized flan and the Queen's head designed by W. Wyan, the then artist of the Royal Mint, London, whose initials—'W.W.' in miscroscopic characters—they bear on the truncation of the Queen's head, the legend being written in two parts (VICTORIA to the left and QUEEN to the right of the royal effigy). Of the First Series, there was no double-mohar, while an unmilled two-anna[2] coin in silver and a half piece[3] in copper were introduced in 1841 and 1853 respectively.

Coins of the Second Series were struck from 1862 to 1876. Irrespective of metals, they all bear on the obverse the Queen's 'Crowned bust' with the legend written in two parts—VICTORIA to the left and QUEEN to the right. The reverse designs of the coins of all metals also changed. The name of the EAST INDIA COMPANY disappeared from the reverse, and instead the name of the issuing country, viz. INDIA, was introduced. The value and date were written in English alone[4] within newly designed floral wreaths. The floral design of gold and copper coins was similar, thoroughly distinct from that of the silver issues.[5]

Two new denominations in gold—the two-third and one-third mohars equivalent to 10 and 5 rupees respectively—were

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not at once indicate such a change; for the same dies prepared under the auspices of the East India Company and without effecting necessary change in date were used for striking coins, until they were replaced by their 1862 counterparts.

1. They are accordingly known as 'Large Victoria' pieces.
2. These small silver Two-anna pieces were of plain edge like the Company's gold and silver coins struck in 1833 and 1834.
3. This is the only coin struck under the auspices of the E.I.Co. not to bear the value in Persian.
4. It seems, the use of Persian on coins was not favoured, hence the use of English alone.
5. The floral wreaths were more of an artistic protioncud than of any representation of a botanical specimen.

introduced in 1870.[1] But there was no change in the number of denominations either of silver or of copper issues.

With regard to silver coins, there were two slight variations in the design of the upper point of the floral wreath : one known as the 'Calcutta design' has a *pointed* leaf, while the other known as the 'Bombay design' has a *round* one.[2]

There was an interesting rumour regarding certain microscopic dots seen on the rupee coins with the date 1862– occuring either 'above the lower flower' or 'simultaneously above the lower flower and below the upper leaves' of the reverse design.[3] It was believed that a master forger most meticulously minted a few lacs of rupees and put these dots as his private marks, each dot denoting each lac of coins he counterfeited ![4] It was naturally a scandalous rumour, and the position was ultimately cleared up in 1939.

As a matter of fact, all these 1862 rupees were products of the Government mints. Though bearing the date 1862, they were minted between 1862 and 1873. The dots were the secret marks of the mints to denote the particular years of minting. Coins struck in 1862 itself did not bear any dot, while for each subsequent year one dot was put. Thus, coins struck in 1863 bore one dot only, those struck in 1864 bore two dots, others produced in 1865 have three dots, and so on, until the number of dots became eleven for the coins of 1873. This curious but secret arrangement was evolved from the system of the 'Sonat rupees' (or rupees of years) from which the mints of Indian princes derived their

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1. The gold coins of the Second Series were struck in 1870 only.
2. Dies prepared from the matrices and punches sent from England for the 1862 silver rupee were not found suitable for technical reasons, So new dies were prepared at the Calcutta Mint closely imitating the English design, but with minute variation in the reverse floral wreath : the topmost leaf was made 'pointed' instead of 'round'. The design with the 'pointed' leaf was adopted for the Calcutta Mint, and that with the 'round' leaf for the Bombay Mint.
3. The lower flower generally bears one to ten dots. On some coins, however, three dots occur either above the lower flower, or two dots below the upper leaf and one dot above the lower flower, and on some other coins ten dots occur above the lower leaf and one dot below the upper flower.
4. At least this is what I heard from my father in about 1928.

profits. New rupees were apparently issued at a premium, which diminished annually for a few years and eventually became 'Sonats' (or of standard value).[1] Since 1874, however, the arrangement of putting dots on rupee coins for denoting the actual year of mintage was discontinued.[2]

The Third Series of Victoria's coins started with her assumption of the epithet EMPRESS on 1 January 1877. Irrespective of metals, coins of this Series are exactly like their Second Series counterparts. The only change effected was with regard to the epithet, which was now EMPRESS (instead of QUEEN). There was no change in the number of denominations of the coins of the respective metals. The full, two-third and one-third mohars in gold and the half anna in copper were discontinued after 1889[3] and 1891 respectively.

Edward VII (1841-1901)

Edward VII succeeded to the throne on 22 January 1901 on the death of his mother Queen Victoria. His coronation originally planned for 26 June 1902 had to be postponed due to his sudden illness, but eventually took place on 9 August in the same year. He died on 6 May 1910.

No gold coin was issued during his reign. There were four denominations in silver and three in copper or bronze.[4] But a coin in a new metal and of a new denomination was

1. Cf. also C. J. Brown, *The Coins of India*, p 103, note 1, regarding the fixation of Regnal years of Muslim-type coins issued by the East India Company : "This was to stop speculation on the part of money-changers, bankers and revenue collectors, who made a rebate on all rupees not of the current year." It is therefore assumed that the Government of India coinage tended also to vary in value with the year appearing on the issue, and the system of secret Mint signs was in consequence evolved to combat this evil.
2. A dot as a mark of the Bombay Mint, however, has been used on later coins of all denominations. On different coins this dot occurs at different places.
3. As a matter of fact, during the Third Series period (1877-1901), gold coins seem to have been struck only in 1889.
4. Bronze is composed mainly of copper and a slight admixture of tin and zinc. The composition varied at different times: (1) 95 per cent copper, 4 per cent tin, 1 per cent zinc since 1906; (2) 95·5 per cent copper, 3 per cent tin 1.5 per cent zinc since May 1936; and (3) 97 per cent copper, 0·5 per cent tin, 2·5 per cent zinc since January 1943.

introduced in 1907; it is the cupro-nickel 1-anna piece with scalloped edge,[1] composed of 75 per cent copper and 25 per cent nickel.

The obverse of the coins of Edward VII (with a single exception) bear his effigy which on silver and copper (or bronze) pieces is without a crown. Concerning this there are still some funny stories current. It is rumoured that due to some mischievous and obstinate acts on the part of young Edward (then called Albert), Queen Victoria denied him the right to wear a crown or strike coins with his crowned effigy.[2] But the inventors of such stories did not know that King Edward VII actually wore a crown like other sovereigns and that coins with his 'crowned bust' were minted not only in other British territories but also in India proper! The newly introduced cupro nickel 1-anna coins depicted Edward's crowned bust on the obverse.

The reason is not far to seek. All the dies for the silver and copper (or bronze) coins were executed prior to the coronation of Edward VII; hence the royal effigy on these coins is depicted as 'uncrowned'. The Tudor Crown, however, is significantly depicted on silver coins as surmounting the reverse design consisting of the value, etc., flanked by floral clusters representative of the Indian Lotus. The case with the 1-anna cupro-nickel coins was different. Originally designed in 1905,[3] these coins were struck for circulation in 1907—long after the coronation; hence the effigy is crowned. As a matter of fact, a 'Pattern' rupee[4] was actually designed in 1910, on the obverse of which the bust of King Edward VII is depicted as wearing a crown, but due to the sudden death of the king such coins were not put into circulation.

However, the cupro nickel 1-anna piece, otherwise obscure,[5] is interesting for more reasons than one. Besides

1. Minor coins with scalloped edge have been issued in many countries viz. Cyprus, Egypt, Iraq, Mauritius, Muscat and Oman, Pakistan, Seychilles, Turkey. The earliest is possibly the silver 3-bit piece of British Guiana, cut off from the 1796 3-guilder pieces. Indian 4-anna CN coins also have scalloped edge.
2. Similar stories were current not only in the Northern parts of India, but also in the South.
3. As known from 'Pattern' specimens.
4. Specimen pieces not approved for mass-scale production are called 'Pattern' coins.
5. Generally found in poor condition and with the legends rubbed off, these Edward VII 1-anna coins are taken by

its above obverse characteristics, it introduced some new features for the reverse not only for itself but also for all subsequent cupro-nickel issues of different denominations.[1] The value was indicated by numerical symbol in English which was enclosed by a square scroll, while on the four sides of the scroll the same value was written in Persian,[2] Hindi, Bengali and Telugu.

Edward VII assumed the epithets 'KING AND EMPEROR', being the 'King of Great Britain and Ireland' and 'Emperor of India'.

George V (1865-1936)

George V succeeded to the throne on 6 May 1910 on the death of his father Edward VII, and was proclaimed King after three days. He was crowned in London on 22 June 1911, and again in December the same year, when he visited India, another crowining ceremony was gone through at a Darbar at Delhi.[3] He died on 20 January 1936.

Coins were struck in the name of George V from 1911 to 1936. In gold, a special 15-rupee piece was issued only once in 1918.[4] Coins of the four denominations in silver were struck regularly from 1911 to 1917. The two anna piece was discontinued from 1918 and was replaced by a square cupro-nickel 2-anna bit. In 1919, the other two coins of lower denomination, viz. the quarter and half rupee pieces, were also sought to be replaced by their cupro nickel 4-anna and 8-anna counterparts ;[5] but the new cupro-nickel pieces were not so popular. While the former coin was minted for a period of three years, the latter was discontinued after the first year of mintage ; and both the quarter and half rupee

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laymen for the George V coins as being wrongly struck with the bust facing *right* (instead of *left*) !

1. This is true of all copper-nickel as well as nickel-bronze coins.
2. Urdu replaced Persian from the time of George V.
3. It is interesting to note that the thrones used by King George V and Queen Mary at the Delhi Durbar were cast in silver at the Calcutta Mint. 96,000 old rupees being melted for the purpose ! See *Num. Suppl.*, XLIII, p. 21.
4. For paying the price of wheat purchased from the Punjab.
5. These coins are respectively of square, scalloped and round shape. They were to replace the silver two anna, quarter rupee and half rupee coins ; but while the cupro-nickel 2-anna coin continued to be minted from 1918 onward, the 4 anna piece was struck from 1919 to 1921 and the 8-anna coin was minted only in 1919.

silver coins were reissued afterwards. Rupee, the highest denomination in silver, was, however, discontinued from 1932. In copper, all the three denominations (viz. pice, 1/2 pice and pie) were regularly minted upto the end of George V's reign. In cupro-nickel, the 1-anna piece, started in 1907, was also continued like the new square 2-anna bit.

All the coins of George V bear his crowned bust on the obverse. Only the reverse designs call for special attention. The floral design of the 15-rupee gold coin was new, while that of the silver coins was adopted from the floral design of the 1910 'Pattern' rupee of Edward VII, which bore his crowned bust. The floral design of the bronze coins, as already noted, was adopted from that of Victoria's gold coins of the Second Series. The reverse designs of the cupro-nickel coins followed the pattern of the 1-anna coin of Edward VII: the respective values in English were enclosed in square scrolls, on the four outer sides of which the respective values were also written in Urdu, Hindi, Bengali and Telugu ; only the shapes of the scrolls were a little different on coins of different denominations.

While the wreaths of the gold and bronze coins were merely ornamental, that of the silver coins represents the interlacing of the three floral emblems of the United Kingdom of Great Britain and Ireland—the Rose of England, the Thistle of Scotland and the Shamrock of Ireland—all surmounted by the floral emblem of India, the Lotus.

It will not be out of place to recount the unfortunate plight of the silver issues of 1911, otherwise known as the 'Pig coins'. It so happened that the tiny elephant occurring on the mail of George V was executed in a careless manner, so much so that it looked more like a 'pig' than like an elephant. No sooner the coins were put into circulation than there was a widespread resentment amongst the members of the muslim community. As a result, the Government had to stop the circulation of these 'Pig coins'.[1] They are rather rare and are in good demand amongst the collectors of Europe and America.

Edward VIII (1894-)

Edward VIII succeeded to the throne on 20 January 1936 on the death of his father George V. But before his coronation he abdicated (on 10 December the same year) in favour

1. This episode is little known at present, and I got a specimen from the house of Muslim friend.

of his brother, H. R. H. the Duke of York, later on King George VI.

No coins were struck in his name.[1]

George VI (1895-1952)

George VI succeeded to the throne on 11 December 1936 on the abdication of his elder brother Edward VIII, and was crowned on 12 May 1937. During his reign, India regained her Freedom from the yoke of the British rule on 15 August 1947, after which date British coins were discontinued. George VI died on 6 February 1952.

During the brief sway of George VI— prior to the Indian Independence— several experiments were carried out with the coining metals. While no gold coins were issued, silver coins of the denominations of rupee, half-rupee and quarter-rupee —bearing the king's crowned 'head'[2] and floral design—were sparingly minted with the dates 1938.[3] All these coins had straight milling like their respective counterparts issued since 1835. Quarternary silver or the so-called Q-metal (composed of 50 per cent silver, 40 per cent copper, 5 per cent nickel and 5 per cent zinc) was introduced in 1940 and used upto 1945 for making coins of the preceding three denominations. On these Q-metal coins, the 'security edge'[4] gradually replaced the usual straight milling. In 1946, nickel pure was introduced to replace Q-metal, efficacy of nickel being proved by the fact that due to its very high melting point coins made out of it are difficult to counterfeit. Rupee, half-rupee and quarter-rupee pieces were minted in nickel during the 1946-47 period. They bear on the obverse the usual 'crowned head of George VI', but the figure of 'a tiger standing to left' replaces the usual floral weath of the reverse. The rupee, half-rupee and quarter-rupee coins are, as before, of the weights of 180, 90, 45 grains Troy respectively; but the rupee alone is of slightly smaller size and has the 'security edge', while the half-rupee and quarter-rupee pieces are of the normal sizes

1. In Kutch, however, some silver coins were struck with the name of Edward VIII.
2. For coins other than rupees the royal head was designed in both high and low relief.
3. Rupee coins with the dates 1938 and 1939 were actually minted in 1940 at the Bombay Mint.
4. 'Security edge' was earlier used on the Mauritius rupees of 1934. However, for Indian coins 'security edge' was introduced on rupees in 1940, on half-rupees in 1941 and on quarter-rupees in 1943.

and have straight milling. Besides English and Urdu, Hindi[1] also was used to express the values of these coins.

Cupro-nickel was used for minting 2-anna and 1-anna pieces from 1939 to 1941. A new metal, generally called nickel-brass but composed of 79 per cent copper, 1 per cent nickel and 20 per cent zinc, was introduced in 1942 to replace cupro-nickel. This compound metal was used for minting not only the 2-anna and 1-anna coins but also a newly introduced coin of the denomination 2-anna, which is a smaller version of the square 2-anna piece. Cupro nickel was re-introduced in 1949 to replace nickel-bronze, and was used for two years for coining all the preceding three minor issues.

The normal-sized bronze coins of the denominations of pice, half-pice and pie were struck from 1938 to 1942. The half-pice and pie were discontinued from 1943, and newly designed pice, much reduced in size and weight and with a central hole, was issued from 1943 to 1947. This coin bears on the obverse the crown, value in English, Hindi and Urdu, the name of the country (INDIA) and date, while the reverse simply has an elaborately ornamental wreath of vine leaf.

With the issues of the 1946-47 period ultimately came the end of the British coinage in India; but the legacy continued, and the Government of free India started issuing in 1950 a new series of coins precisely in the same metals and of the same denominations[3]— only with suitable changes in the obverse and reverse designs.

LIST OF COINS

William IV (1830-1837)

Gold

1. *Æ*. Rd. Two Mohars: Wt. 360 grs. Sz. 1·3 in. Straight milling.

   Obv. In raised rim and pellet border, uncrowned head of king to r. Legend above: (1) WILLIAM (r.) IIII, KING (below) 1835.

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1. This was the first time that Hindi was used to give the values of coins of higher denominations.
2. They are popularly termed 'washer coins'.
3. Rupee, half-rupee and quarter-rupee in nickel; 2-annas, 1-anna and 1/2-anna in cupro-nickel; and pice alone in bronze. The pice, though of the size of the 1943-47 pice, is not holded.

Rev. In raised rim and pellet border, lion standing to l. behind palm-tree. Legend: (above) EAST INDIA COMPANY (in exergue) TWO MOHURS/value in Persian.

2. *Æ*. Rd. One Mohar: Wt. 180 grs. Sz. 1·0 in. Straight milling.

Obv. In pellet border, uncrowned head of king to r. and legend, as on No. 1.

Rev. In pellet border, lion etc. and legend, as on No. 1, but value, ONE MOHUR/its Persian equivalent.

Silver

3. *Æ*. Rd. One Rupee: Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. In pellet border, uncrowned head of king to r. and legend, as on No. 1.

Rev. Within a floral wreath, value: ONE RUPEE and its equivalent in Persian. Legend around: (above) EAST INDIA COMPANY (below) 1835. The whole in pellet border.

4. *Æ*. Rd. Half Rupee: Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. In pellet border, uncrowned head of king to r. and legend, as on No. 1.

Rev. In pellet border, wreath and legend, as on No. 3, but value: HALF/RUPEE/its Persian equivalent.

5. *Æ*. Rd. ¼ Rupee: Wt. ·5 grs. Sz. ·75 in. Straight milling.

Obv. In pellet border, uncrowned head of king and legend, as on No. 1.

Rev. In pellet border, wreath and legend, as on No. 3, but value, ¼/RUPEE/and its equivalent in Persian.

Copper

6. Æ. Rd. Half Anna: Wt. 200 grs. Sz. 1·1 in. Unmilled.

Obv. On an ornamental stand, Company's Coat-of-Arms consisting of the crossed shield, with two supporting lions on r. and l., and a crest-lion flanked by Union Jacks on top. Below date, 1835 and scroll with the Latin legend, AUSP: REG: & SEN: ANG: The whole in raised rim.

Rev. In raised rim, floral wreath, between the upper points of which is the value in Persian; English legend: (within wreath) HALF ANNA (above wreath) EAST INDIA COMPANY.

7. Æ. Rd. One Quarter Anna: Wt. 100 grs. Sz. 1·0 in. Unmilled.

Obv. In raised rim, Coat-of-Arms, etc., as on No. 6.

Rev. In raised rim, wreath and etc., as on No. 6, but value, ONE/QUARTER/ANNA within wreath, and between its two upper points equivalent value in Persian.

8. Æ. Rd. $\frac{1}{12}$ Anna: Wt. 33$\frac{1}{3}$ grs. Sz. ·65 in. Unmilled.

Obv. In raised rim, Coat-of-Arms, etc., as on No. 6.

Rev. In raised rim, wreath etc., as on No. 6, but value within wreath: $\frac{1}{12}$/ANNA/its Persian equivalent.

Victoria (1837–1901)

FIRST SERIES

Gold

9. A/. Rd. One Mohar: Wt. 180 grs. Sz. 1·0 in. Straight milling.

Obv. In pellet border, uncrowned (and somewhat elongated) head of queen to l. Legend: (above) VICTORIA QUEEN (below) 1841.

Rev. Lion, etc. and legend, as on No. 2, but date, 1841.

9a. A/. Rd. One Mohar: Wt. 180 grs. Sz. 1·0 in. Straight milling.

Obv. In pellet border, uncrowned (and somewhat round) head of queen to l. Legend: (l) VICTORIA (r.) QUEEN (below) 1841; 'W.W.' in microscopic characters on truncation of the neck.

Rev. In pellet border, lion, etc. and legend, as on No. 9.

Silver

10. Æ. Rd. One Rupee: Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. In pellet border, uncrowned (and somewhat elongated) head of queen and legend, as on No. 9, but no date.

Rev. Floral wreath and legend, as on No. 3, but date 1840.

10a. ℞. Rd. One Rupee: Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. Uncrowned (and somewhat round) head and legend, as on No. 9a, but no date.

Rev. Floral wreath and legend, as on No. 10.

11. ℞. Rd. Half Rupee: Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. In pellet border, uncrowned (and somewhat elongated) head of queen and legend, as on No. 10.

Rev. Floral wreath and legends as on No. 4, but date, 1840.

11a. ℞. Rd. Half Rupee: Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Uncrowned (and somewhat round) head of queen and legend, as on No. 10a.

Rev. Floral wreath and legend, as on No. 4, but date 1840.

12. ℞. Rd. ¼ Rupees: Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Uncrowned (and somewhat elongated) head of queen and legend, as on No. 9.

Rev. Floral wreath and legend, as on No. 5, but date 1840.

12a. ℞. Rd. ¼ Rupees: Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Uncrowned (and somewhat round) head of queen and legend, as No. 10a.

Rev. Floral wreath and legend, as on No. 5, but date 1840.

13. ℞ Rd. Two Annas: Wt. 22½ grs. Sz. ·6 in. Unmilled.

Obv. Uncrowned (and somewhat elongated) head of queen and legend, as on No. 9.

Rev. In pellet border, floral wreath with legend: (within) TWO/ANNAS/ equivalent value in Persian (above) EAST INDIA COMPANY (below) 1841.

13a. ℞. Rd. Two Annas: Wt. 22½ grs. Sz. ·6 in. Unmilled.

Obv. Uncrowned (and somewhat round) head and legend, as on No. 9a.

Rev. Floral wreath and legend, as on No. 13.

Copper

14. Æ. Rd. Half Anna : Wt. 200 grs. Sz. 1·1 in. Unmilled
Obv. Coat-of-Arms, etc., as on No. 6, but date 1845.
Rev. Floral wreath and legend, as on No. 6.

15. Æ. Rd. One Quarter Anna : Wt. 100 grs. Sz. 1 0 in. Unmilled.
Obv. Coat-of-Arms, etc , as on No. 6, but date 1857.
Rev. Floral wreath and legend, as on No. 7.

16. Æ. Rd. ½ Pice : Wt. 50 grs. Sz. ·8 in. Unmilled.
Obv. Coat-of Arms, etc., as on No. 6, but date 1853.
Rev. In raised rim, floral wreath; legend : (within) ½/ PICE (above) EAST INDIA COMPANY.

17. Æ. Rd. $\frac{1}{12}$ Anna : Wt. 33⅓ grs. Sz. .65 in. Unmilled.
Obv. Coat-of-Arms, etc., as on No. 6, but date 1848.
Rev. Floral wreath and legend, as on No. 8.

SECOND SERIES

Gold

18. A/ Rd. One Mohar : Wt. 180 grs. Sz. 1·0 in. Straight milling.
Obv. In pellet border, crowned bust of queen to l. Legend : (l.) VICTORIA (r.) QUEEN.
Rev. Floral wreath within pellet borders; legend within wreath : ONE/MOHUR/INDIA/1870.

19. A/. Rd. Ten Rupees : Wt. 120 grs. Sz. .87 in. Straight milling.
Obv. Crowned bust of queen and legend, as on No. 18.
Rev. Floral wreath etc., as on No. 18, but value, TEN RUPEES.

20. A/. Rd. Five Rupees : Wt. 60 grs. Sz. ·52 in. Straight milling.
Obv. Crowned bust of queen and legend, as on No. 18.
Rev. Wreath etc., as on No. 18, but value FIVE RUPEES.

Silver

21. ℞. Rd. One Rupee: Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. In pellet border, crowned bust of queen and legend, as on No. 18.

Rev. In lined circle with pellets around, ornamental floral wreath; legend within: ONE/RUPEE/ INDIA/1862.

22. ℞. Rd. Half Rupee: Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc. as on No. 21, but value HALF/ RUPEE.

23. ℞. Rd. ¼ Rupee: Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc., as on No. 21, but value ¼/ RUPEE.

24. ℞. Rd. Two Annas: Wt. 22½ grs. Sz. ·6 in. Unmilled.

Obv. Crowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc., as on No. 21, but value TWO/ ANNAS.

Copper

25. Æ. Rd. Half Anna: Wt. 200 grs Sz. 1·1 in. Unmilled.

Obv. In pellet border, crowned bust of queen and legend, as on No. 18.

Rev. Floral wreath within pellet borders, as on No. 18; value within: HALF/ANNA/INDIA/1862.

26. Æ. Rd. One Quarter Anna: Wt. 100 grs. Sz. 1·0 in. Unmilled.

Obv. Uncrowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc. as on No. 25, but value, ONE QUARTER ANNA.

27. Æ. Rd. ½ Pice: Wt. 50 grs. Sz. ·8 in. Unmilled.

Obv. Uncrowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc., as on No. 25, but value, ½/PICE.

28. Æ Rd. $\frac{1}{12}$ Anna : Wt. 33⅓ grs. Sz. ·65 in. Unmilled.

Obv. Uncrowned bust of queen and legend, as on No. 18.

Rev. Floral wreath etc., as on No. 25, but value $\frac{1}{12}$ ANNA.

THIRD SERIES

Gold

29. AV. Rd. One Mohur : Wt. 180 grs. Sz. 1·0 in. Straight milling.

Obv. Crowned bust of queen to l. and legend : (l.) VICTORIA (r.) EMPRESS.

Rev. Floral wreath etc., as on No. 18, but date 1889.

30. AV. Rd. Ten Rupees : Wt. 120 grs. Sz. ·87 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 19, but date 1889.

31. AV. Rd. Five Rupees : Wt. 60 grs. Sz. ·52 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc. as on No. 20, but date 1889.

Silver

32. AR. Rd. One Rupee : Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. Crowned bust and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 21, but date 1877, etc.

33. AR. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 22, but date 1877.

34. AR. Rd. $\frac{1}{4}$ Rupee : Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 23, but date 1877.

35. Æ. Rd. Two Annas : Wt. 22½ grs. Sz. ·6 in. Straight milling.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 24, but date 1877.

Copper

36. Æ. Rd. Half Anna : Wt. 200 grs. Sz. 1·1 in. Unmilled.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc. as on No. 25, but date 1877.

37. Æ. Rd. One quarter Anna : Wt. 100 grs. Sz. 1·0 in. Unmilled.

Obv. Crowned bust of queen and legend, as on No 29.

Rev. Floral wreath etc. as on No. 26, but date 1877.

38. Æ. Rd. ½ Pice : Wt. 50 grs. Sz. ·8 in. Unmilled.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 27, but date 1877.

39. Æ. Rd. 1 Anna : Wt. 33⅓ grs. Sz. 65 in. Unmilled.

Obv. Crowned bust of queen and legend, as on No. 29.

Rev. Floral wreath etc., as on No. 28, but date 1877.

Edward VII (1901–1910)

Silver

40. Æ. Rd. One Rupee : Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. In pellet border, uncrowned head of king to r. Legend : (l.) EDWARD VII (r.) KING AND EMPEROR.

Rev. In pellet border, legend in centre : ONE/RUPEE/ INDIA value in Persian ; cluster of lotus wreath on either side ; above, Tudor Crown ; and below, date 1903.

41. Æ. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Uncrowned head of king and legend, as on No. 40.

Rev. Wreath, crown etc., as on No. 40, but value, HALF/RUPEE. Date, 1904.

42. Ⱥ. Rd. Rupee : Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Uncrowned head of king and legend, as on No. 40.

Rev. Wreath, crown etc. as on No. 40, but value, RUPEE.

43. Ⱥ. Rd. Two Annas : Wt. 22½ grs. Sz. ·6 in. Unmilled.

Obv. Uncrowned head and legend, as on No. 40.

Rev. Wreath, crown, etc., as on No. 40, but value, TWO/ANNAS.

Cupro-nickel

44. CN. 1 Anna : Wt. 60 grs. Sz. ·8 in. Scalloped edge.

Obv. In raised rim crowned bust of king to r. and legend : (above) EDWARD VII KING AND EMPEROR.

Rev. Within a squarish scroll a big 'I' in the centre, around which is the legend : (l.) AN- (r.) NA (top) INDIA (below) 1907. The value is also written in four different ways : (below l.) in Bengali (below r.) in Hindi (above l.) in Urdu (above r.) in Telugu.

Copper or Bronze (since 1906)

45. Æ. Rd. One quarter Anna : Wt. 100 grs. (75 grs. since 1906). Sz. 1·0 in. Unmilled.

Obv. In pellet border, uncrowned head of king and legend, as on No. 40.

Rev. Floral wealth within pellet borders, as on No. 26, but date, 1904.

46. Æ. Rd. ½ Pice : Wt. 50 grs. (40 grs. since 1906). Unmilled.

Obv. Uncrowned head of king and legend, as on No. 40.

Rev. Floral wreath etc., as on No. 28, but date 1903.

47. Æ. Rd. $\frac{1}{12}$ Anna : Wt. 33⅓ grs. (22 grs. since 1906). Sz. ·65 in. Unmilled.

Obv. Uncrowned head of king and legend, as on No. 40.

Rev. Floral wreath etc., as on No. 28, but date 1903.

George V (1910–1936)

Gold

48. AV. Rd. 15 Rupees: Wt. 180 (?) grs. Sz ·85 in. Straight milling

Obv. In pellet border, crowned bust of king to l. Legend above: GEORGE V KING EMPEROR.

Rev. Ornamental floral wreath between two pellet borders: legend within: 15/RUPEES/INDIA/1918.

Silver

49. AR. Rd. One Rupee: Wt. 180 grs. Sz. 1·2 in. Straight milling

Obv. Within a rim with inner fringe of small semi-circles-with-dots, bust of king to left wearing imperial crown surmounted by an orb and Maltese cross; the bust is adorned with embroidered collar and ermine tippet with a sash-bow at right shoulder, a star at throat, two chains pendent on breast distinctive of the stars of India and of the Indian Empire, one of which has a diminutive elephant. Legend above: GEORGE V KING EMPEROR.

Rev. Within a rim with similar inner fringe, ornamental floral wreath again within two double-lined circles; the wreath has at the top the side view of a lotus, at the bottom another lotus as viewed from above, and to right and left (from top to bottom) respectively the rose, the shamrock and the thistle, each with leafy stalk; wavy line enclosing at the top separates each of the eight floral emblems. Legend within the double-lined inner circle: ONE/RUPEE/INDIA/1911 value in Urdu.

50. AR. Rd. Half Rupee: Wt. 90 grs. Sz. .95 in. Straight milling.

Obv. Crowned bust of king and legend, as on No. 49.

Rev. Wreath etc., as on No. 49, but value, HALF RUPEE.

51. AR. Rd. Rupee: Wt. 45 grs. Sz. ·75 in. Straight milling

Obv. Crowned bust of king and legend, as on No 49.

Rev. Wreath etc. as on No. 49, but value, ¼/RUPEE.

52. *AR*. Rd. Two Annas: Wt 22½ grs. Sz. ·5 in. Straight milling.

Obv. Crowned bust of king and legend, as on No. 48.

Rev. Wreath etc., as on No. 49, but value, TWO ANNAS.

Cupro-nickel

53. CN. Rd. 8 Annas: Wt. 120 grs. Sz. 1·0 in. Unmilled.

Obv. In raised rim, crowned bust of king and legend, as on No. 48.

Rev. In a double-lined square scroll, with a scalloped border within, a big '8' in the centre, around which is the legend: (below) ANNAS (above) INDIA 1919; outside the scroll value written in four different ways: (l.) in Hindi (top) in Urdu (r.) in Bengali (below) in Telugu. The whole within raised rim.

54. CN. 4 Annas: Wt. 110 grs. Sz. 1·0 in. Scalloped edge.

Obv. Within a lined circle, crowned bust of king to l. legend around the circle: (above) GEORGE V KING EMPEROR (below) INDIA 1919. The whole within raised rim.

Rev. In a double-lined square scroll, a big '4' in the centre with ANNAS written below; outside the scroll, the value written in four different ways, as on No. 53. The whole within raised rim.

55. CN. Sqr. 2 Annas: Wt. 90 grs. Sz. ·8 × ·8 in. Unmilled.

Obv. Within a double-lined circle, crowned bust of king to l.; legend above: GEORGE V KING EMPEROR. Outside the circle; (l.) 19–(r). 18 (top) floral decoration (below) INDIA. The whole within a raised rim.

Rev. In a double-lined square scroll, a big '2' in the centre with ANNAS written below. Outside the scroll the value written in four different ways, as on No. 53. The whole within a raised rim.

56. CN. 1 Anna: Wt. 60 grs. Sz ·8 in. Scalloped edge.

Obv. In raised rim, crowned bust of king and legend, as on No. 48.

Rev. In raised, within and outside the squarish scroll, value etc., exactly as on No. 44, but date 1912.

Bronze

57. Æ. Rd. One Quarter Anna : Wt. 75 grs. Sz. 1·0 in. Unmilled.

Obv. In pellet border, crowned bust of king to l. and legend, as on No. 48.

Rev. Floral wreath within pellet borders, as on No. 26, but date 1911.

58. Æ. Rd. ½ Pice : Wt. 40 grs. Sz. ·8 in. Unmilled.

Obv. Crowned bust of king and legend, as on No. 48.

Rev. Floral wreath etc., as on No. 27, but date 1911.

59. Æ. Rd. $\frac{1}{12}$ Anna : Wt. 22 grs. Sz. ·65 in. Unmilled

Obv. Crowned bust of king and legend, as on No 48.

Rev. Floral wreath etc., as on No. 28, but date 1911.

Edward VIII (1936–)

No coin issued for British India.

George VI (1936–1952)

Silver

60. AR. Rd. One Rupee : Wt. 180 grs. Sz. 1·2 in. Straight milling.

Obv. In a border composed of dots and crescents-with-dots, crowned head of king to l. Legend : above GEORGE VI KING EMPEROR.

Rev. Wreath representing the floral emblems of Rose, Thistle, Shamrock and Lotus as on No. 49, but within singled-lined circles, and legend, as on No. 49, but date 1938. The whole within a border composed of dots and cresents-with-dots.

61. AR. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Crowned head of king and legend, as on No. 60.

Rev. Wreath etc. as on No. 50, but date 1938.

62. AR. Rd. ¼ Rupee : Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Crowned head of king and legend, as on No. 60.

Rev. Wreath etc., as on No. 51, but date 1938.

Quarternary Silver

63. QS. Rd. One Rupee : Wt. 180 grs. Sz. 1·2 in. Security edge.

Obv. Crowned head of king and legend, as on No. 60.

Rev. Wreath etc. as on No. 60, but date 1940.

64. QS. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Crowned head of king and legend, as on No 61.

Rev. Wreath etc., as on No. 62, but date 1940.

64a. QS. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Security edge. Similar to No. 61, but date 1942.

65. QS. Rd. ¼ Rupee : Wt. 45 grs. Sz. ·75 in. Straight milling. Similar to No 62, but date 1940.

65a. QS. Rd. ¼ Rupee : Wt. 45 grs. Sz. ·6 in. Security edge. Similar to No 62, but date 1943.

Nickel

66. N. Rd. One Rupee : Wt. 180 grs. Sz 1·05 in. Security edge.

Obv. In thick raised rim, crowned head of king to l. and legend as on No. 60.

Rev. In thick raised rim, maned tiger walking to l. Legend (above) ONE RUPEE with its Hindi equivalent on l. and Urdu equivalent on r. (in exergue) INDIA/1947.

67. N. Rd. Half Rupee : Wt. 90 grs. Sz. ·95 in. Straight milling.

Obv. Crowned bust of king and legend as on No. 66.

Rev. Tiger etc., as on No. 66, but value HALF RUPEE and its Hindi and Urdu equivalents in similar positions.

68. N. Rd. Quarter Rupee : Wt. 45 grs. Sz. ·75 in. Straight milling.

Obv. Crowned bust of king and legend as on No. 66.

Rev. Tiger etc. as on No 66, but value QUARTER RUPEE and its Hindi and Urdu equivalents in similar positions.

Cupro-nickel

69. CN. Sqr. 2 Annas : Wt. 90 grs. Sz. ·8 × ·8 in. Unmilled.

Obv. In dotted incuse circle, crowned head of king and legend, as on No. 60. Ornamental designs on four corners.

Rev. In dotted incuse circle, a scalloped design with a big '2' in the centre and ANNAS written diagonally; below '2' INDIA/1939/value in Telugu; value in Hindi on l., in Urdu on top and in Bengali on r. Ornamental designs on four corners.

70. CN. 1 Anna : Wt. 60 grs. Sz. ·8 in. Scalloped edge.

Obv. In raised rim, crowned head of king and legend, as on No. 60.

Rev. Squarish scroll with value etc. as on No. 44, but date 1938.

71. CN. Sqr. ½ Anna : Wt. 45 grs. Sz. ·7 × ·7 in. Square.

Obv. Crowned head of king, legend etc , as on No. 69.

Rev. In a squarish scroll, value 'AN 1/2 NA' in the centre with INDIA above and 1946 below; outside the scroll value written in four different ways: (1) in Hindī (top) in Urdu (r.) in Bengali (below) in Telugu.

Nickel-brass

72. NB. Sqr. 2 Annas: Wt. 90 grs. Sz. ·8 × ·8 in. Square. Similar to No. 69, but date 1942.

73. NB 1 Anna: Wt. 60 grs. Sz. ·8 in. Scalloped edge. Similar to No. 70, but date 1942.

74. NB. Sqr. ½ Anna : Wt. 45 grs. Sz, .7 × ·7 in. Similar to No. 71, but date 1942.

Bronze

75. Æ. Rd. One Quarter Anna: Wt. 75 grs. Sz. 1·0 in. Unmilled.

Obv. In pellet border, crowned head of king and legend, as on No. 60.

Rev. Floral wreath within pellet borders, as on No. 26, but date 1938.

76. Æ. Rd. ½ Pice : Wt. 40 grs. Sz. ·8 in. Unmilled.

Obv. In pellet border, crowned head of king and legend, as on No. 60.

Rev. Floral wreath within pellet borders, as on No. 27, but date 1938.

77. Æ. Rd. $\frac{1}{12}$ Anna : Wt. 22 grs. Sz. ·65 in. Unmilled.

Obv. In pellet border, crowned head of king and legend, as on No. 60.

Rev. Floral wreath within pellet borders, as on No. 28, but date 1939.

78. Æ. Pice : Wt. 30 grs. Sz. ·84 in. (sz. of central hole being ·37 in.). Unmilled.

Obv. Ornamental wreath of vine leaf.

Rev. Crown above; legend : (l.) 1 PICE (r.) INDIA; value in Hindi on l. and in Urdu on r.; date 1943 below.

HOARDING OF THE PRECIOUS METALS IN INDIA*

A. H. LLOYD

'From time immemorial India has continually absorbed the precious metals.' *Report of the Royal Commission (1913) on Indian Finance and Currency.*

India has produced the precious metals throughout historical times, and while, because of the great number of her population, 'more in number than any nation known to me', says Herodotus, the tribute laid upon her by Darius was greater than that of any other province, it was levied in gold[1] probably because India was then of all his dominions the principal source of that metal The tribute required by Darius was 360 talents, and, as the Euboic talent was employed for gold,[2] so Herodotus tells us the tribute reached the gold weight of about 1,140,000 sovereigns, though its purchasing equivalent at that time was vastly greater. India's production of gold in the year 1925 was about half as much again, being equal to the weight of 1,673,500 sovereigns;[3] in 1931 she produced £ 1,566,340.[4]

We do not know what weight of gold India produced in the days of Darius: it may have taxed even her great capacity to reach the weight of the tribute, or, on the other hand, the statesmanship of the Great King may have led him to take no more than two thirds of what was produced annually, in which case the annual production in the fifth century B. C. would be approximately the same as that of 1925. We may regret that Herodotus does not satisfy our curiosity as to the quantity of gold produced in his day by India, but he goes some way to compensate us for that lack by giving interesting details of some of the methods of producing it. He says—I quote Godley's translation in the Loeb edition—'All this abundance of gold ... they win in such manner as I will show.' He describes certain classes of the inhabitants and then proceeds:

'Other Indians dwell near the town of Caspatyrus and the Pactyic country, northward of the rest of India...they are of all Indians the most warlike, and it is they who are charged with the getting of the gold, for in these parts all is desert by

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1. Hdt., III, 94.
2. Ibid., 89.
3. *Indian Year Book*, 1927, p. 658.
4. *Whitaker*, 1934.

reason of the sand. There are found in this sandy desert ants not so big as dogs but bigger than foxes.... These ants make their dwellings underground, digging out the sand in the same manner as do the ants in Greece, to which they are very like in shape, and the sand which they carry forth is full of gold. It is for this sand that the Indians set forth into the desert. They harness three camels apiece, a male led camel on either side to help in draught, and a female in the middle: the man himself rides on the female, careful that when harnessed she has been taken away from as young an offspring as may be. Their camels are as swift as horses, and much better able to bear burdens besides.... Thus and with teams so harnessed the Indians ride after the gold, using all diligence that they shall be about the business of taking it when the heat is greatest; for the ants are then out of sight underground... So when the Indians come to the place with their sacks, they fill these with the sand and ride away back with all speed, for, as the Persians say, the ants forthwith scent them out and give chase, being, it would seem, so much swifter than all other creatures that if the Indians made not haste on their way while the ants are mustering, not one of them would escape. So they loose the male trace camels that they lead, one at a time (these being slower than the females); the mates never tire, for they remember the young that they have left. Such is the tale. Most of the gold (say the Persians) is got in this way by the Indians; there is some besides that they dig from mines in their country, but it is less abundant... As I have lately said, India lies at the world's most distant eastern limit; and in India all living creatures four-footed and flying are by much bigger than those of other lands, except the horses...; moreover the gold there, whether dug from the earth or brought down by rivers or got as I have shown, is very abundant.'

Out of all those details of method we cannot find anything to guide us to an estimate of weight of annual production. But whatever may be the absolute relationship of the modern and ancient yields of India's sources of supply, they became during the days of classical antiquity, and have continued to the present time, utterly inadequate to her own needs. From the testimony of Herodotus, Strabo, Pliny, and Arrian we learn that the natives of India have always esteemed as well as produced the precious metals. From the fifth century before Christ, when she robbed the 'ant'-miners of their hard-won gold, down to recent days, when she obtains the satisfaction of her needs by more modern methods of exchange, India has stood in the forefront of the gold- and silver-using countries of the world.

India in modern times produces silver as well as gold, and it would be unreasonable to infer, from the levying of her tribute to Darius in gold, that she did not produce the white metal in his day. Five hundred years earlier than the days of Darius silver, because of its plenty, 'was not anything accounted of, in the days of Solomon';[1] and as Darius was obtaining it from nineteen Satrapies he may well have confined his demand upon the twentieth to the more valuable and much rarer metal.

In the year 1925 India's production of silver was valued at £ 705,703.

It is a commonplace frequently uttered that India hoards gold and silver, and it is understood that the statement is made upon the authority of government statistics, with which, however, the majority of those referring to the matter are unfamiliar. The statistics do not deal with hoarding which, by its very nature, lies outside the competence of any government. They concern themselves with the values of the precious metals (1) produced, (2) imported, (3) exported. By adding (1) and (2), and from the sum thereof deducting (3), there is obtained the value of silver and gold retained in the country. After making allowance for the value of the two metals by which the stocks in the mints, currency department, main and district treasuries, and any other government stores are increased or diminished, there is obtained the figure which is described as the 'net absorption' of the country.

These statistics are prepared annually and their cumulative effect is also presented. It would be beyond the purpose of this inquiry to present the statistics in any detail, but the few quotations which follow are a fair summary of the whole.

Here is an extract from the *Encyclopaedia Britannica*:[2] 'The total imports for the year 1905-1906 were valued at 82½ millions sterling, including 14 millions of gold and silver, which are continually hoarded by the people of India.' The figures are doubtless official and the extract is given as a sample of the facts and the inferences from them which have formed the basis of public knowledge of India's hoarding. That quotation comes from the eleventh edition and the fourteenth deprives us of the opportunity of bringing the figures nearer to date.

During the five years ended the 31st of March 1926, India's net *imports* of gold and silver, coin and bullion,

1. 2 Chron., IX, 20.
2. 11th edn., XIV, p. 394.

amounted to more than one hundred and ninety million gold pounds That comes from *The Statesman's Year Book*.[1]

During the thirty-two years ended the 31st of March 1926 the net *absorption* of gold alone, coin and bullion, was nearly four hundred and twenty million pounds (£419, 377,500)

Despite the great exodus of gold after the abandonment of the gold standard by Great Britain in September 1931 (over £13 millions left the country in the month of December that year) it appears that for the five years *ended* March 1932 India had added a net amount in gold and silver, coin and bullion, of more than 37 million pounds. By the taking of pains it would be possible to bring the five-yearly figures up to the date of writing, but that would be wearisome and it would have no serious bearing upon an inquiry seeking to discover the principles underlying an age-long practice whose hold upon the people of India shows no sign of having diminished during the first thirty years of the twentieth century. Between September 1931 and March 1933 over £94 millions of gold left India, and it will help us to appreciate the light in which that fact was regarded by the Government of that country if we remember that on the 25th of January 1933, in his inaugural address to the Indian Legislature, the Viceroy said in dwelling upon that export, 'India is able to tap a portion of her own vast resources and by parting with a *very small portion of her immeasurable stores of gold* to realize ... public advantages ... combined with private profit.' Such influences are temporary in their effect, and it is not unlikely that the recent export is creating a vacuum in India which a stabilization of the world's currencies will cause her to fill and so to suck in again as much, if not more than she has sent out in that very natural profit-hunger whose effect has been so beneficial to the rest of the world.

In 1913 a Royal Commission[2] on Indian Finance and Currency (the Chamberlain Commission) was appointed, and in the Minutes of Evidence, in answer to question 1032, the information is found that 'The absorption of sovereigns by the public in the 14 years from 1899-1900 to 1912-1913 was £ 64,815,000, while the absorption of rupees during the same period was £ 66,750,000'. [It must be noted that these figures quoted from the Minutes of Evidence relate to coin only; they take no account of the large amounts absorbed of both metals in bullion.]

1. *The Statesman's Year Book*, 1927, p. 135.
2. *Accounts and Papers* (Reports, Commissions), 1914, XIX.

Public opinion in Great Britain, though not always informed of the magnitude of the absorption, is commonly associated with amazement at the facts and frequently speculates upon their interpretation. Strange suggestions are offered, based upon a conception of India as a land of romance, and fed by a recollection of studies during immaturity of Aladdin and his wonderful lamp. Though the sober truth is amazing enough, it owes nothing to the weird or supernatural, for it is based upon an economic foundation, supported by racial law and custom, that has continued with the minimum of disturbance during two or three thousand years. It is no exaggeration to say that in the twentieth century ninety per cent of the population of India are living in their relations to money-economy in conditions similar to those of the Greeks of the sixth and fifth centuries B.C., when coinage was introduced amongst the most advanced City-States. It is probable that there are other parts of the world, particularly in Asia, where conditions prevail similar to those here being examined in India, but it would be difficult indeed to find any other country where on a large scale a population subject to advanced Western statistical documentation still preserves uncontrolled, in almost every detail of its life, the social system it has inherited from a remote past.

Of the total value of the net absorption by India of the precious metals (for this purpose silver and gold) part goes into industry and the arts, part into currency circulation, part to swell the metal reserves of bankers and money-lenders, and the remainder into hoards. None of these channels of distribution is susceptible of exact measurement, and the hoard, knowledge of whose detail and extent is in the very nature of things withheld from others, is measurable least of all. The location, extent, and composition of hoards can in the main be no more than matter of opinion, and the most that can be required is that the opinion shall be responsible and well informed.

It is opinion of that character that was offered to the Royal Commission of 1913 already mentioned. That Commissionwas not concerned to examine the practice of hoarding; if that matter had been a cardinal feature of its terms of reference, the evidence offered, while gaining much in volume, would have lost more in spontaneity and perhaps in value. The detached attitude of the Commission in its official capacity to the subject of hoarding is clearly indicated by the fact that the only reference to the matter in the Final Report is found in the paragraph quoted at the head of this paper: 'From time immemorial India has continually absorbed the precious metals.'

As it was, in the course of evidence bearing upon the question of a gold coinage for India, and kindred subjects, many witnesses examined by the Commission used their knowledge of Indian hoarding to illustrate and support their views and recommendations. This led to questions by various members of the Commission which brought out much interesting and useful information.

The evidence of public men, government officials, bankers, traders, and manufacturers, European and Indian, supplemented by question and answer in the sittings of the Commission, forms the responsible and well-informed opinion upon which the following statement is based.

There appears to be a curious unwillingness with some observers, European and Indian alike, to use the word 'hoard', not from any doubt as to the existence of what others mean by 'hoarding' but apparently from the conception that the particular word implies a reproach. Perhaps the occasional phrase 'miser's hoard' may partly account for this attitude, as does certainly the belief that the retention of private stores of precious metals implies a lack of education. This is not necessarily a modern objection to hoarding; there is warrant for it in Holy Writ, though in that case the buried treasure belonged not to the holder but to his master.[1] Intelligent investment may well be an outcome of education, but the possession by the native Indians of solid bullion and coin is a more successful retention of wealth than many forms of investment, such, e.g., as the investment by Lancashire cotton operatives in the shares of cotton-spinning companies whose share certificates are at the present time in most instances titles to liability rather than to wealth. In regard to Indian hoarding, the difficulties of the objectors seem to be removed by the use of the synonyms 'saving', 'reserves', and the like.

The people of India have always hoarded gold and silver, and at the present time more than ever owing to the greater prosperity of the country. This form of accumulation is practised by all classes who can by any means afford it. The rulers of the great native States, such as Mysore and Hyderabad, have vast stores resembling those of great mediæval monarchies of Europe and those of Greek city rulers such as Dionysius of Syracuse: where the modern differ from these ancient examples is in the greater magnitude of their wealth. The large zemindars, 'almost princes in the sense of incomes', the rulers of the smaller States, and

1. Matt., XXV, 24-8.

the smaller zemindars also have their treasuries whose fame is so great that they must be fortified and their owners escorted by armed retainers as they move about their estates. And so the procession makes its way down the ordered grades of wealth until it reaches the humblest individuals in field and factory whose additions are made a rupee at a time. The advance in prosperity is frequently shown in the use of gold by those who formerly hoarded silver: at the Amritzar fair recently (1913) the well-to-do agriculturalists had strings of sovereigns round their necks whereas formerly they had strings of rupees.

In a country so large as India, with its many varieties of climate, race, religion, and economic development, it is not always possible to employ terms and make statements which will possess the same precise value in every district. There are places for instance where sovereigns were occasionally seen in circulation, but the area is restricted and the number of sovereigns seen was small.

That eminent authority, Sir Henry Howard, quoting Mr. Gauntlett, says, 'In Northern India, Bombay and part of Madras the use of the sovereign as currency is steadily increasing. In other parts of India its main use is still for conversion into ornaments or jewellery.' In the great bulk of the country, however, a sovereign is never seen passing from hand to hand, and there is ample testimony that the great mass absorbed by the country goes permanently out of sight. Some do go into hoards as sovereigns but the bulk is melted down. The substitution in great measure of gold, in the form of coin and bullion, for silver for the purpose of additions to the hoards of the poorer members of the population is comparatively recent, being due to the great increase in supply, and consequent fall in price, of silver in the latter part of the nineteenth century. Before that period India's 2,000 million ounces of silver was said to be one-fifth of the world's total stock. One of the witnesses before the Silver Commission of 1876, Mr. MacKenzie, gave the following description of the manner in which silver rupees passed into the hoards of the Indian peasants. 'In every large village there is a silversmith, and as soon as a man gets a few rupees he employs the silversmith to come to his house and make the ornaments. Although the peasantry in India have poor house, yet the amount of ornaments they have would exceed in value the furniture and utensils of the same class of peasantry in England.' For hundreds of years their whole thrift had been the conversion of silver coins by melting to bullion or ornaments. Silver came to them through coins—coins previous to the coinage of any rupees, all sorts of strange

primitive coins. When the rupee came the ryots, having neither cash-boxes nor bank accounts, were in the habit of sending for the silversmiths, and, says the witness, Mr. Frewen, 'I have seen them, and so has everybody who knows India, welding on the bangles in the bazaars. The silversmiths would take the rupees, melt them up, weld them on the arm or the ankle of the man or woman, and charge an anna or two for the job.'

The possession of wealth in such forms has certain definite advantage in a simple society. For instance, still quoting the same witness,

'A rupee can be stolen The natives have got no cash boxes, and they have to bury their wealth or carry it on their persons. You can only steal rupees when they are in the form of bangles by a direct frontal attack.... The possessor of a sovereign is unsafe unless he has melted or bangled it ; his neighbours will say "So and so has got a sovereign ; let us see if we can find it." Moreover, as bangles, they lost none of their uses as wealth. In famine time they used to go to their bunnia or village sowkar and they would cut those bangles off, and the sowkar would weigh them and give them a loan of rupees at a rate ... according to the pressure of the demand.... But still they could always get par... and the sowkar knew that if he had got 100 tolas of silver from the native, it was always as good as 100 rupees to him because he had only to send it to the nearest mint for free coinage. The sowkars did not, indeed, send these native ornaments into the mint unless they were themselves pressed for money ; they held the ornaments and they collected their interest.... If I were a peasant and wanted 100 rupees, the sowkar would retain my bangles or my ornaments, often heirlooms which I valued, until after I got my crop in, and then I would go and ransom them.'

To these stimuli to hoards of the precious metals are added others based upon Hindu law and social custom. According to Hindu law, no Hindu can alienate, either by will or by gifts *inter vivos*, any property movable or immovable to provide for the welfare, after his death, of his wife or any female member of his family. Even the widow is entitled only to a miserable pittance and the other females of the family, daughters or sisters, have no legal claim at all upon the heir, who may be a scamp of a nephew without any bowels of compassion. Gifts of jewellery have been looked upon as lying outside the legal bar and to these recent custom has added gifts in coins. To his wife and to his daughters then the thoughtful husband makes continuous presents of

sovereigns and jewellery as and when he can. They are presented to a daughter at her birth and upon various occasions thereafter, and a girl of an ordinary middle-class family would in this way have absorbed 50 or 100 sovereigns at least. The sovereigns may be melted down immediately or may be kept until there number is sufficient to make the contemplated pieces of jewellery or gold ornament. The intention so to use the sovereigns as provided by custom seems to have extended the protection beyond the ornaments actually made to the sovereigns from which others could be made. Not only are such personal gifts to women immune from any successful claim by the heir; they cannot be attached even for the husband's or the family's debts. The jewellery and ornaments can be worn by the wife only during her husband's lifetime. Immediately upon her becoming a widow they are realized and the proceeds invested to provide her with an income. The legal provision for a wife in accordance with Muhammadan law, leaves much to be desired, and similar hoard provisions for female members of the family are made by many Muhammadans. This is said to apply to members of that community in Egypt also.

A large part of the people of India is under the frequent necessity of raising loans. Seventy per cent or thereabouts of the population is mainly agricultural and the cultivators have to pay the first instalment of their land-tax, in some places both, before the harvest. For these and other demands money must in most cases be raised. Personal credit is almost unknown in India, and banks especially do not lend without security. The money-lenders who may be induced to make a loan without security charge a rate of 3 per cent per month and insist upon a duration of twenty months, which means interest of 60 rupees for a loan of 100 rupees for twenty months. There is the possibility of mortgaging the land but the publicity and cost of this present very serious objections, and for the Indian who wants to avoid both mortgage and unsecured loans the easiest way is to raise money by pledging his wife's or his family's jewellery, a method simple, secret, and cheap.

To the Indian native, of whatever class, it is obvious that the advantages of a hoard of coin or bars or ornaments in the precious metals are very substantial. Even if one here and there were able to set aside the influence of heredity and custom (always saving the imperative necessity of providing the endowment for his wife and daughters) and adopt the use of western methods, the facilities available are mostly out of his reach.

'Roughly 75% of the total towns in India with a popula-

tion of 10,000 and over have no banks ; while in some 20% of the 75 towns which possess a population of more than 50,000 inhabitants, the same condition prevails. Probably this situation is to be ascribed to the fact that the habit of investment is comparatively undeveloped in India, its place being taken by hoarding, and by the conversion of bullion into jewellery.'[1]

So the vicious circle is complete.

The hoards, broadly speaking, are meant to be permanent. They may be used occasionally as pledges for loans, but it is always with the intention of their being redeemed. The tenacity with which hoards are held applies to all classes of hoarders.

The very greatest of all, who, by reason of their wealth, position, and education, have other sources of income, do not need to resort to their treasuries. Beneath these giants come others, still very wealthy, the great zemindars. Of these it is said that 'they put by for a rainy day a certain amount of bullion and a certain amount of gold in ornaments which never see daylight. They are old-fashioned ornaments, very heavy gold bangles and so forth, which the ladies of India no longer care quite so much for, their taste having changed in favour of more modern jewellery and precious stones.' But there are three great occasions upon which it is invariably the practice of Indians to make a great outlay and display : the marriage of a daughter, the coming of age of a son, and funerals. For the proper discharge of this *trinoda necessitas*, many even of the rich zemindars pledge their gold bullion to the marwaris and the bunnias with the intention of getting it back. Some of the smaller men over-reach themselves and spend more than they can afford. They may not be able to redeem that portion of their hoard which they pledge, 'but it goes back in that form somewhere else'.

Coming to humbler classes, Messrs. Toomey and Fraser, who jointly spoke for the exchange banks of India, were asked the question : 'You cannot suggest any means or any sort of inducement by which those hoards of the ryot class should be brought out ?' And their answer was : 'No, there is no way we can suggest. He can afford to keep these hoards and will not part with them'. Another witness said, 'I will quote a case within my own experience at Aurungabad. A little cultivator who had borrowed 400 rupees from a local sowkar died,

1, Statement exhibiting the Moral and Material Progress of India during the year 1923—1924, *Accounts and Papers* (Reports, Commissioners), XI, 1924-5, p. 118.

and apparently left nothing in the world, so the sowkar got an order to examine his premises. They found 4000 rupees, although he was paying 1½ per cent a month for this loan of 400 rupees.'

Two other inducements to hoarding apart from those already considered are mentioned by an Indian witness; one of them enlarges upon what has already been said upon a similar point, but its details seem to justify separate statement. (1) Every agriculturalist and land-owner, when he gets a little surplus, turns it into jewellery. It gives his wife a status as a rich woman, brings peace and happiness at home, as well as providing a source for raising money in emergencies. If his savings are small he buys the sovereigns as he can and presents them to his wife who holds them until there are sufficient to make the ornament desired. (2) This form of hoarding enables traders to endow themselves through their wives with a provision against business misfortune Two large traders, a leather merchant and an iron merchant, recently (the witness was speaking in 1913) became insolvent. All the assets of both concerns passed into the hands of the Official Receiver, but the jewellery of the wives and daughters was exempt from his power of attachment and the processes of the court. In one case, six months after the insolvency, the jewels of one man were valued at ten lakhs of rupees. Every trader, small or large, with purely honest motives, puts by at least a portion of his savings in the form of jewels. The witness is himself an Indian and he adds, 'It is unnecessary to mention that some may consider it the best way of cheating a creditor.'

The coin taken for hoarding is the standard coin; formerly this was the rupee, but, since the token value of the rupee has been so widely divorced from the value of its silver content, its place has very largely been taken by the sovereign amongst those who formerly hoarded silver. Smaller coins are not hoarded: it is the standard coins that are chosen. Thus the half-sovereign, though it is legal tender, is not used. "There is absolutely no demand for them; banks do not import them for that reason.' Another witness says, "This coin does not find favour in India.' And, as all classes hoard if pieces of five pounds were available they would be largely used, for it is in a downward direction that a limit is found. The 10-ounce gold bars imported from Australian mints are very largely used for melting down into ornaments just as are sovereigns themselves. The secretary and treasurer of the Bank of Madras, Mr. W. B. Hunter, says that in one small village in the Presidency between 300 and 400 sovereigns a

week are taken to be melted down immediately into an imitation coin representing the old 5-franc piece, which is very popular as an ornament for a necklace; they are not counterfeit coins for, while they have the head on one side, the other side is blank.

It should be said that coins do also remain in hoards without being melted down. Sir Alexander McRobert told of one of his firm's work-people whose house was robbed shortly before the witness left India to give evidence before the Commission. Sir Alexander went to see him and received details of the property that had been stolen, and it included twelve sovereigns. Their retention as coins, however, seems to be a minor use; one witness says 'many sovereigns go into the melting-pot', but others put the melting-pot use much higher, one saying that the demand for sovereigns is merely for use for bullion. Why, then, if it is the metal as bullion that is mainly wanted for hoarding, are sovereigns taken instead of gold bars? The answer is twofold. First, coins can be got more readily in small quantities than bar gold; second, their weight and fineness which constitute their value are definitely fixed, being vouched for by responsible and trusted mints.

This account of Indian hoarding may fitly be closed by the quotation of a short discussion in question and answer by two Indian gentlemen, Sir Shapurji Broacha, a member of the Commission, and Mr. M. R. Sivadara Iyer, one of the witnesses.

"Q. 9000. Would you not agree with me that it [hoarding] is an instinct which we have inherited owing to the unsatisfactory character of the Government we have had in India before? *Answer.* Assuming education advances and that Indians learn more and more the nature and value of investments, I do not think hoarding will lessen because of the reasons I have given.

Q. 9002. In ten years we have imported 70 millions in bullion and 57 millions in sovereigns, that is, 127 millions sterling, which is equal to 190 crores of gold, and the only visible sign of that are the 25 crores left in the currency. Would such a thing happen in any other country? *Answer.* I cannot say what would happen in other countries. I can only say that we can imagine that it would not happen in any other country, but we know exactly what happens in India.

Q. 9003. In other countries the sovereigns are either in the banks or they are preserved, as it were, for contingencies. For instance, if England had imported 10 millions sterling, certainly 7 millions would have been in the Bank of England,

or even 8 or 9 millions; whereas out of the 190 crores which we have imported into India, we see only visible signs in the possession of the Government of some 25 crores. As you know, more than any other country, we keep, either for ornaments or for hoarding, gold out of circulation; do you not admit that? *Answer.* It is true."

Though this is not directly a paper upon numismatics, it may not be without its interest to those concerned in that study. The persistence of the habit in individuals in a simple society of acquiring and retaining coins as a store of wealth, and even of depriving them of their immediate currency and exchange-value by converting them into ornaments or melting them into ordinary bullion forms, presupposes their use for such purposes in ages past amongst societies in an equally primitive state of domestic economy. It is customary to regard the invention and introduction of coins as being primarily due to and serving the needs of commerce. Their value as stores of wealth was inherent, but may we not assume, from the continued practice of their use for hoarding in India from the earliest times, that the suitability of small portions of the precious metals, of defined weight and authoritatively guaranteed fineness, may have had at least an equal, perhaps even a prior, influence upon the introduction and early spread of coinage?

HOARDS OF COINS

R. C. MAJUMDAR

It is a well-known fact that coins form a very important source of history, particularly of ancient India, and hoards of coins, big or small, have been discovered in many localities in different parts of India. Apart from the individual coins found in these hoards, numismatists have attached great importance to the very fact that a large number of coins were found together. Of the many general conclusions drawn from this circumstance, I propose to deal with two, which require special consideration.

I

It is generally assumed that the hoards were consequences of foreign invasions which caused the owners of coins to conceal them as a measure of security. From this assumption sometimes the date of a hoarding has been deduced by connecting it with a probable invasion, known from other sources. A typical instance is furnished by the observations of A. S. Altekar on the Bayana hoard :

"The unknown owner of the present hoard, probably a resident of Bijayagadh, had buried it in a field of his own at Hullanpura at the time of the Hūṇa invasion. Very likely he was killed in the disturbances, and so the hoard remained undisturbed till 1946."[1]

Now, is there any plausible ground for any of the deductions made by Altekar ? Let us first consider the general question of the causes of hoarding. In ancient days there was no regular system of depositing money safely in a public institution like bank. We have reference to deposit of money with guilds or corporations, but that was a sort of permanent investment for carrying out certain purposes out of the interest of the deposit. It was, therefore, of the nature of endowment and not safe-keeping. So far as we know, for the latter purpose, people had to devise their own methods. Even in modern times a man would not like to keep a large amount in his own house unless he could make special arrangements for guarding it and possessed a good iron safe. For though we are not afraid of foreign invasions, we have to take precautions against theft and robbery. We can hardly open a

1. Dr. A. S. Altekar, *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, p ii.

morning paper today without some report of a theft or dacoity. It can be well imagined that people were not more secure against these pests of society in ancient days. The most natural thing for a man in those days would, therefore, be to hide his treasure, not required for immediate needs, under the earth in a spot known only to him. A box may be broken, but no thief or robber was likely to dig up the whole area surrounding a house. Many stories are current even today of this well-known ancient practice. This is a simple and natural explanation of hoarding, and I see no reason to seek for another unless there be some special evidence. Whereas no such evidence is forthcoming, the discovery of some hoards fully corroborates the natural explanation. Altekar has given a list of the hoards of Gupta coins discovered so far.[1] Among these the hoards at Tanda, Kotwa, and Hughli contained respectively, 25[2], 17, and 13 coins. Now if a man fled from home in fear of a foreign attack he could have easily carried with him the small number of coins and would not probably have taken pains to bury them underground on the off chance of his being able to return home. In these cases we are bound to presume that the coins were buried underground just for ordinary security rather than any special cause such as a foreign invasion. As a large majority of hoards, so far discovered, contained a number of coins small enough to be easily carried by a person, it may be assumed that hoarding, as a rule, need not be looked upon as merely due to fear of foreign invasion. Of course, for all we know, some hoardings might be the result of such fear—though it would be somewhat unusual—but we have no right to assume that a hoard necessarily indicates a foreign invasion. General insecurity from thieves and robbers must be presumed to be the chief reason in most cases.

It may be argued that big hoards, like that at Bayana containing 1821 coins, could not be easily carried away, and therefore must have been left in a panic when the owner fled for safety against a foreign attack. But there is no valid reason for this conclusion. There is a long interval of more than 130 years between the issue of the oldest and latest coins of the hoard. It may be easily presumed, therefore, that the collection extended over several generations. Such collection leads to the inference that it was owned by a business firm or a wealthy aristocratic family. In either case there must have been well-devised measures of security for preserving this

1. Ibid., pp. iv-ix.
2. Altekar puts the number as 15 (p. vi), but this is obviously a printing mistake for 25.

great wealth or even much greater wealth of which it formed only a part. It is not very reasonable to suppose that they would sit with folded hands until the scare or reality of a foreign invasion induced them to fly in a hurry, leaving the immense treasure in a pot hidden under the earth. It is more rational to think that the burying under earth was the normal way followed by the owners from generation to generation, which was not changed in course of time, except to make the pots bigger and bigger, or add new pots as the bulk of the contents required.

A much bigger hoard was found at Jogalthembi in the Nasik District. It consisted of 13,250 silver coins. These were solely coins of Nahapāna and coins of Nahapāna restruck by Gautamīputra Śātakarṇi.[1] It was therefore a collection made within a short time, after Gautamīputra had expelled the foreign conqueror and established the undisputed supremacy of his family. No fear of foreign invasion has been suggested as the cause of this hoarding, the biggest so far known. Here, again, it is a natural presumption that the large collection belonging to any rich merchant or royal office was kept in the ordinary way for security against thieves and robbers.

We need not suppose, as Altekar has done, that the accidental or unnatural death of the owner of a hoard is the only possible explanation for the undisturbed existence of the hoard. A man might die a natural death without leaving any heir or without any opportunity of communicating the secret of the hiding place to him. No man would normally like to reveal the secret until the very end, and the end may come all of a sudden. In any case, the theory of foreign invasion and death in battle, in order to account for a hoard, has little to commend itself.

II

An attempt is sometimes made to fix the relative chronology of the kings whose coins are found in a hoard. It is assumed that the larger the number of coins belonging to a particular king, the nearer was he to the time of the hoard, i. e., later in point of time than the others with fewer coins. An exception to this rule is made when a king is represented by a very few coins in proportion to the whole, on the assumption that the coins were hoarded at the beginning of his reign or that he had a very short reign. These assumptions do not make allowance for special circumstances or mere

1. E. J Rapson, *Catalogue of the Coins of the Andhra Dynasty*, etc., pp. lxxxviii-lxxxix.

accidents, and in any case are not supported by actual facts where we have a good opportunity of testing them. The Bayana hoard supplies a concrete illustration. Of the 1821 coins in this hoard, 983 belong to Chandragupta II and only 628 to the next reign. There is a single coin of Skandagupta. In other words, the large majority of coins belong to a king who must have ceased to reign more than half a century before the coins were hoarded. The single coin of Skandagupta also presents a problem. Of course, it must be remembered that about 285 coins in the hoard were lost. But there is nothing to show that these would have very much altered the ratio between the coins of Chandragupta II and Kumāragupta. It is very probable, however, that a few more coins of Skandagupta might have been found in the hoard. The disparity in the number of coins belonging to Chandragupta II and Kumāragupta I cannot be put down to such assumptions as are generally made, namely, either the longevity of the reign or the proximity of the reign to the time of hoarding.

The paucity of the coins of Skandagupta may be explained by the assumption that the hoarding took place almost immediately after his accession to the throne. But then it would hardly be in keeping with the other assumption that the hoarding took place at the time of the Hūṇa invasion. For we have good grounds to believe that there was no Hūṇa invasion during the first two or three years of the reign of Skandagupta, in course of which hundreds of his coins must have been issued.

The Bayana hoard seems to demonstrate that the hoarding of coins, generally speaking, was a continuous process and not due to any sudden decision to collect all the money one could lay hands upon and then put them deep under the earth. For, in that case, it would be difficult to explain the presence of about the hundred coins of Samudragupta, put in circulation about a century before the hoarding. Sometimes old coins are collected as curios, as Akbari mohurs are acquired nowadays, but their number is not likely to be as high as 183, the number of coins belonging to Samudragupta in the Bayana hoard. One may argue that the value of gold-contents in coins was a determining factor in the selection of coins. But this has no application in the Bayana hoard as no question of debased coins arises till we come to the time of Skandagupta.

This introduces another interesting point, namely the deduction of important historical inferences on the basis of debasement of coins, real or supposed. A classic example is

furnished by the heavy-standard of Skandagupta. Some specimens of these coins exhibit a decline in the amount of pure gold in each piece from 108 to 73 grains, and V. A. Smith and others drew the very important inference that the treasury of Skandagupta experienced great difficulty in meeting the expenses of the Hūṇa war.[1] Recently a fresh examination of some coins show that the heavy-standard coins of Skandagupta were not at all debased, at least as a general rule, and therefore the exhaustion of his treasury and many other theories based upon the debasement theory fall to the ground.[2] This one example is sufficient to warn us against the danger of making deductions from coins on insufficient grounds or drawing plausible, but by no means necessary or logical, conclusions from specific circumstances like hoarding.

1. V. A. Smith, *Early History of India* (3rd Edition), p. 311.
2. Dr. B. P. Sinha, *The Decline of the Kingdom of Magadha*, p. 47.

THE OWNERSHIP OF TREASURE TROVE IN ANCIENT INDIAN POLITY

JOHN W. SPELLMAN

The three groups that usually lay claim to treasure trove are the finder, the owner of the land and the State. In ancient India, there is no doubt that the king owned some of the land privately. The larger question is—how could he justify a claim to treasure trove found on land owned by another person ? Here it is necessary to distinguish between the concept of land—which is largely territorial, and that of earth—which is an idea of substance. The king is the lord of the soil (*bhūmeradhipati*) and for this reason and because he gives protection, Manu declares that he obtains one half of ancient hoards and metals found in the ground.[1] Other texts also agree that the king is the owner of various types of mines and minerals found in the earth,[2] and the *Arthaśāstra* gives in detail the duties of the various government officials responsible for these mines and other properties of the king [3]

A number of legends are found in ancient Indian literature which are used to justify this position of the king. One difficulty was that these legends had to be constructed in a way that would not hurt the sensitivities of the Brāhmaṇas who exercised an impotent claim over everything on and in the earth. The *Anuśāsana Parvan* states that a woman, in the absence of her husband, takes his younger brother for her lord. In the same way, the Earth, not having obtained the Brāhmaṇa, makes the Kshatriya her lord.[4] This refers to a story told later in the epic in which Pururavas asked the god of wind to whom the earth rightcously belonged. The reply was, "Everything that exists in the universe belongs to the Brāhmaṇa in consequence of his birth and precedence. Persons conversant with morality say this. What the Brāhmaṇa eats is his own. The place he inhabits is his own. What he gives away is his own. He deserves the veneration of all the other orders. He is the first-born and the foremost. As a woman, in the absence of her husband, accepts his younger brother in his place, even so the earth, in consequence of the refusal of the Brāhmaṇa, has accepted his next born, the

1. *Manu*, VIII, 39.
2. *Vishṇu*, VIII, 55.
3. *Arth.* II. 12.
4. *Mbh.* Anu, 8. 22.

Kshatriya, as her lord."[1] It is, therefore, through the "favour of the Brāhmaṇas that the Kshatriyas are able to possess the eternal and undeteriorating Earth as their wife and enjoy her."[2]

The king was therefore, considered the symbolic owner of the Earth in ancient India. The relationship was expressed as that of a husband to his wife. This symbolic relationship was not without its political implications. The king was to protect the earth at all times. Through his sacrifices and by the radiation of his *dharma*, the king gave nourishment to the Earth. Rainfall and other natural phenomena, beneficial or otherwise, were considered as a consequence of the king's actions.

In the early Vedic texts we have no evidence to indicate that the king had a royal prerogative on treasure trove. This idea came into greater force by perhaps the sixth or seventh centuries B. C. when the earliest law books were compiled. Of course, in this connection it is possible to hold that the theory had some operation a few hundred years earlier, but the significant point to note is that up to the Brāhmaṇa literature no explicit reference to the king's ownership of treasure trove may be found. Even the epics, while they give foundation arguments for the ideas which developed later regarding the king's right to treasure trove, do not emphasise this aspect of the king's economic position. In one section, however, the *Rāmāyaṇa* does indicate the possible existence of the theory. King Viśvāmitra was making attempts to have the sage Vaśishṭha give him Savalā, the cow of abundance. In the course of argument, the king said, "Verily this one is a jewel, and as it is the function of kings to acquire jewels, do thou confer on me Savalā, for this one belongs by right to me."[3] Vaśishṭha, however, refused to recognize the force of this argument. The king's statement may mean that jewels, since they are found in the earth, belong to whoever owns the mineral deposits of the earth. The argument implies, of course, that the king was the owner of these since he says that jewels belong by right to him. Yet, this conclusion is not a necessary one since other interpretations may also validly be given to Viśvāmitra's statement. We need only recognize the possibility that the theory of the king's ownership of treasure trove may have been in existence at the time this passage was written.

1. *Mbh.* Ś. P. 73. 10-12.
2. *Mbh.* Ś. P. 343. 62-63.
3. *Rāmā.* Bāla, 53. 12b.

Another theory used to justify the king's claim on treasure trove may be that since the king was considered the protector of the earth, any wealth found therein must be considered as the fee that the king receives from the earth for protecting it. While this view undoubtedly personifies the earth, such an interpretation was very common in ancient Indian literature. The primary reason advanced for the king's right to exact taxes was that he afforded protection to the people. "It is because he protects the people that the king may take his share of the taxes."[1] "The one-sixth share of the produce that the king takes is his fee for protecting the subjects."[2] If a king takes taxes without protecting the people, he commits great *adharma*.[3] From these premises of taxation as the fee for protection, the king could be understood to have the right to all treasure trove, or at least part of it, since he protected the earth in which it was found.

A distinction must be drawn between lost or stolen articles which also went to the king and treasure trove. Lost or stolen property came into the possession of the king because he was required to compensate the owner for any thefts that occurred. The reasoning was that the individual paid taxes for protection. If his property was stolen, the king obviously was not fulfilling his obligations of protection and therefore had to compensate for this deficiency on his part. If the property was recovered, he was able to do this without incursions upon the treasury. Since he was bound to restore the property in any case, it was but reasonable that lost or stolen property should revert to the king in order that he might give it back to the owner or replenish the loss from his own treasury.

It is in the law books that the problem of the ownership of treasure trove is treated most fully. We have seen that there was a theoretical conflict between ownership by the king and that by the Brāhmaṇas. Even though the king was the protector of the earth, the Brāhmaṇas were the protectors of the king and there is no question but that their religious position at least was superior to the kings. Due to these reasons and perhaps the necessity of irritating the Brāhmaṇas as little as possible, the authors of the dharmaśāstras made concessions to the Brāhmaṇas when they were the finders of treasure trove. In some cases, it is remarkable that part of the treasure was to be given to the Brāhmaṇas even if they did not themselves find it. Yājñavalkya is the most lavish in this regard. "The

1. *Gautama*. X. 28.
2. *Baudh*. I. 10. 18. 1.
3. *Rāmā*. Āraṇya. 6. 517.

king having found treasure trove should give half to the twice born ; but a learned Brāhmaṇa finding treasure trove may keep the whole, for he is the lord of all."[1] This is a clear reference to the Brāhmaṇa making a claim to possession on the basis of caste and those ideas which postulate the theory that he is the owner of everything in the universe. Other writers favoured the Brāhmaṇas less. Vaśishṭha declares that only a righteous Brāhmaṇa may keep his find. Other persons must bring the treasure trove to the king who will reward the finder with one-sixth.[2] And Nārada does not give automatic concessions to the Brāhmaṇas. "A Brāhmaṇa, even when he has found treasure, must at once give notice to the king. If the king gives it to him, he may enjoy it. If he does not give notice, he is regarded as a thief."[3] For other persons, he leaves no doubt that treasure trove that is found must go to the king.[4]

The claims of the king to treasure trove in ancient India, were therefore supported by theories which had recourse to his position in relation to the earth—either as its husband or protector. It was not merely the force of power, which any State has, that entitled him to receive this treasure. The finder of the treasure trove was also entitled to some compensation, according to some sources. The exact position of the owner of the land itself is not clear. It may be that he was not considered significant since the usual find came in the earth itself, whose possessions belonged to the king, and not in the property on the earth. The texts, however, do not give enough evidence to have a completely satisfactory definition of treasure trove from the modern point of view Presumably, ancient Indian kings who found the coins of other ancient Indian kings considered they were treasure trove and kept them.

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1. *Yāj.* II. 34.
2. *Vaśishṭha.* III. 13-14. It may be noted that the usual tax rate claimed by the king is also one-sixth and it is possible to suggest that there is a relationship, in this sense, between the theories of treasure trove and those of taxation. However, more evidence is necessary before the parallel can be accurately stated. At the same time here is a clear indication that the finder of treasure was rewarded—a practice which has unfortunately been discontinued by the Indian government in modern times.
3. *Nārada.* VII. 7.
4. *Idem*

TREASURE TROVE LAWS IN INDIA—A REVIEW

P. L. GUPTA

In ancient days, when people were not so bank-minded, they were accustomed to keep their savings and other valuables in an earthen or metal pot and bury it either in the wall of a house or in an obscure corner of its floor. They just used to open the mouth of the pot, take out the need and the surplus. This system continued generations after generations in each family. Generally the head of the family knew about the treasure and he disclosed the location of the treasure to his successor in the last days of his life. But at times, with the sudden death of the man having the secret, the treasure, unknown to the members of the family, remained where it was buried. It also used to happen that in the times of calamities like war, arson, flood, epidemic etc., people left their abode and moved to other places. In doing so, at times, they could not take their valuables, hidden under the earth, or they knowingly buried them in the strain of the panic, with a view to recover them back when the peace returned. Such hidden valuables, in most cases, remained forgotten or untraced by their owners.

Such treasure troves, it is natural, used to be accidentally found, as they are found today, in all times in the past. And therefore, it was also natural that the law of the time should provide some rules for their disposal.[1] We know from some of the *Jātaka* stories that the ownerless treasure-troves were considered the property of the State. In them, we find such phrases as "treasure trove is royal prerogative (*assāmikabhāṇḍam rajasantakam hoti*[2],)", "unclaimed treasure belongs to the king (*assāmika bhāṇḍam rāññ) papunati*[3])". At one place the king himself has said "masterless money comes to me (*assāmika dhanam amhkam papunati*)".[4]

Kauṭilya in his *Arthaśāstra*, dealing with the inheritence of property, has laid down that property for which no claimant was found would go to the king (*adāyādakam rājā haret*)[5]. At another place he has laid down thus:

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1. See also 'The Ownership of Treasure Trove in Ancient Indian Polity' by John W. Spellman, pp. 133-136, *ante*.
2. *Jātaka*, 1, 398.
3. Ibid., VI, 348.
4. Ibid., IV, 485.
5. *Arthaśāstra*, III, 5 (Text, II, p. 34; trans, p. 183).

"Of whatever precious things sweepers come across, while sweeping, one third shall be taken by them and two thirds by the king. But precious stone shall be wholly surrendered to the king. Seizure of precious stones shall be punished with the highest ammercement.

"A discoverer of mines, precious stones or treasure trove, shall on supplying the information to the king, receive one-sixth of it as his share; but if the discoverer happens to be a servant of the king, his share shall only be one-twelfth of it.

"Treasure troves valued beyond 100,000 (paṇas) shall wholly be taken by the king; the finder shall be entitled to one-sixth of the treasure trove upto 100,000 (paṇas) of the whole.

"Such treasure troves as a man of pure and honest life can prove to be his ancestral property shall wholly be taken by the man himself. Taking possession of a treasure trove without establishing such claim shall be punished with a fine of 500 paṇas. Taking the possession of the same in secret shall be punished with a fine of 1000 paṇas."[1]

In the *Dharmasūtras* and the *Smṛitis*, the treasure trove laws are favourable to Brāhmaṇa finders. They proclaim unanimously that if a treasure trove was found by a learned Brāhmaṇa, he was entitled to keep the whole of it. If the king himself found the buried treasure, he was to distribute half of it and was to keep for himself the other half. Opinion differed as to the rights of other finders. Vishṇu has distinguished the cases as the finder was a Kshatriya, Vaiśya or a Śūdra, and asks each of them to surrender a stated portion both to the king and to the Brāhmaṇas.[2] Gautama gave the whole to the king except a trifle to the finder.[3] But Manu, Yājñavalkya and others, like Kauṭilya, have held the finder to recieve one-sixth of the treasure trove.[4]

In the *Niśīthachūrṇi*, a Jain work of the seventh century, there is an interesting reference regarding treasure trove. The *gāthā* relates a story that a king named Mayūrāṅka issued *dināras* (gold coins), bearing the figure of a peacock and buried them. They remained in that condition for a very long time till an astrologer by his magical power found them out. When they

1. *Arthaśāstra*, IV, I (Text, II. p. 121-22; Trans., p. 230-31).
2. *Vishṇu*, III, 56 64.
3. *Gautama*, X, 43-45.
4. *Manu*, VIII, 37-38; *Yājñavalkya*, II, 34-35; *Vaśishṭha*, III, 14-15; *Nārada*, asvamivikraya, verses 7-8.

were being used in business transactions, an officer arrested a person carrying out this illegal transaction and produced him before the king. On inquiry from the king, the arrested person disclosed the name of the person from whom he had got those coins. The latter was called for and he in turn named another person. In this way the original founder was detected and punished.[1]

How the treasure troves were disposed in the times of the Muslim rulers in India, is nowhere specifically mentioned. However, we have two anecdotes regarding the treasure trove finds of the time of Sikander Lodi, the ruler of Delhi (1488-1517 A. D.) narrated by Ahmad Yādgār in his *Tawārīkh-i-Shāhī*, which he had compiled under the patronage of Daud Shah, the last ruler of Bengal (1572-1576 A. D.).

According to one anecdote, a man in the province of Sambhal found five thousand *Asharfis* (gold coins) in a big pot while he was digging the earth. The governor Kāsim Khān took all the coins in his custody and informed about them to the king. The king, on knowing the details, sent an order that the wealth should be returned back to the man, who had found it. Kāsim Khān again wrote to the king that the finder was not so deserving that he should be given so much wealth. Thereupon the king said, "Who are we to say that the man does not deserve the wealth. Had God thought him unworthy, he would not have given him that wealth. Whom he thinks worthy, he bestows with the wealth. So, return those *Asharfis* to the man. If even a *dirham* went elsewhere, you would be punished for that." Along with this, the king also ordered the governor that he was responsible for the safety of the wealth till the man arranged for its proper custody.

The other anecdote relates that while a man was ploughing the land of Sheikh Mahmood, a stone came out of the furrow. He immediately went to Sheikh and informed him. On hearing, Sheikh sent his son to the field. He cleaned the earth and turned up the stone and found that there were lying under that stone pots full of gold. Some of those pots had the name of the Macedonian Alexander inscribed on them. When the governor of Deobāmpur (?) Alīkhān heard the news, he sent his man to Sheikh and claimed the wealth as the administrator of that territory. The Sheikh returned the man with the reply that "Had God meant to give the wealth to him (i. e. the governor), there was hardly any need to put anyone else in between." Then Alī Khan reported all the

1. *Niśīthachūrṇi*, p. 843.

facts to the king; but the king reprimanded him for his actions. In the meantime, Sheikh sent some of the vessels, which had the name of Alexander, filled with gold, to the king and inquired as to where the treasure, so found, should be sent. The king wrote back that Sheikh should keep all the treasure for himself. "The land and the wealth belonged to God; he bestowed them upon those whom he thought deserving." Along with these words, he also returned the vessels sent by Sheikh.[1]

The author of *Tawārīkh-i-Shāhī* has recorded these anecdotes to impress the personal virtues of Sikander Lodi. They hardly reflect the fact that the treasure belonged to him who found it. On the other hand, the claims made by the governors suggest that the State had some interference in the matter of treasure troves.

The Muslim jurists have laid down some rules regarding the treasure trove finds. They had made distinction between the treasure which bore a distinctly Muslim impression, like Kalimā, verse from the Korān or the name of a Muslim ruler and the treasure which had the image or the name of a non-Muslim ruler. With this distinction, they were of the opinion that the Muslim treasure would become the property of the finder, if he had advertised the find properly and no claimant had proved a title to it. However, they were of the opinion that if the finder was rich, he should distribute it as alms amongst the poor. And curiously enough, they have enumerated amongst such pauper recepients the parents, children and wives of the finder also.

As regards the non-Muslim treasure, they held that the king was entitled to one-fifth of the treasure if it was found in an ownerless land. If the find-spot was an appropriated land, then, some of the jurists thought, the four fifth of the treasure-trove should go to the person, to whom that land was first granted after the subjugation of the country by the Muslims, or to his heirs and and not to the finder. At the same time, it was accepted that if the existing proprietor laid claim to the trove, declaring that it was deposited by himself, his declaration was to be credited. But, it appears that the Mughal governors never followed

1. I owe this information to Mehar Muhammad Khan Shihab, who had translated and published some of the interesting anecdotes from the *Tawārīkh-i-Shāhī* in the Monthly *Alamghir* (Lahore), Special Number, 1948, p. 36-50.

these rules and claimed the entire treasure trove as the State property.

When the East India Company held the position of administrator in the eighteenth century, it followed the practice of the Mughal governors in the beginning. But soon after in 1777, a proclamation was issued declaring that for the future "all treasure shall be the property of those who may discover it." This sweeping renunciation of State claims was modified in 1817 by a resolution that it should apply only to cases where the treasure found did not exceed a lac of rupees.[1]

The Regulation 5 of 1817 embodied in law the rules for dealing with the treasure troves. It applied to hidden treasure consisting of gold or silver coins or bullion or precious stones or other valuable property found buried in the earth; and it laid down a procedure of inquiry. The finder was required to notify his discovery within one month to the district or city judge, and to deposit the treasure in the court. Failure to notify his discovery within the prescribed period rendered him liable to loose his rights to it. After the notification, the procedure laid an advertisement and fixed a period of six months, within which claims were to be made. Any claim of title made so, was inquired into; and if no right was proved, the finder recieved the entire treasure upto the value of rupees one lac; any excess went to the Government. Provision for appeal of the judge's order to the provincial court was there. Revenue officers had to bring forward any claim of right which Government might appear to possess. This was the law for Bengal Presidency.

Similar provisions for the Madras and Bombay Presidencies were enacted in 1832 and 1838, and were applied to territories aquired later, such as the Punjab, Awadh, the Central Provinces and Burma. These Acts remained in force till 1878.

On 13th February 1878, a new Act (Act VI of 1878) was enacted. The reasons for this new legislation are interesting. It was found very doubtful what law was actually in force in Bombay Presidency outside the city. In the three Presidency towns of Madras, Bombay and Calcutta also, it was not certain what law applied and it was thought probable that English law was in force there. The Regulation of 1817 was also found inducing to the finders to conceal or make

1. Herrington, *Analysis of the Bengal Laws and Regulations*, p. 764.

away with their treasure. When the Bill for the Act was introduced, Sir Steuart Bayley stated that he had known no case in which Government had benefitted by a share, as no trove had been reported exceeding a lac in value. This Act with a slight amendment made by an Amending Act (Act XII of 1891) is still in force in the country. It runs as follows :

"1. This act may be called the Indian Treasure Trove Act, 1878. It extends to whole of British India.

2. (Repealed).

3. In this Act --

"Treasure" means anything of any value hidden in the soil, or in anything affixed thereto.

"Collector" means (i) any revenue officer in independent charge of a district, and (ii) any officer appointed by the Provincial Government to perform the functions of a Collector under this Act.

When any person is entitled, under any reservation in an instrument of transfer of any land or thing affixed thereto, to the treasure in such land or thing, he shall for the purpose of this Act, be deemed to be the 'owner of such land or thing'.

4. Whenever any treasure exceeding in amount or value ten rupees is found, the finder shall, as soon as practicable, give to the Collector notice in writing : (a) of the nature and amount or approximate value of such treasure; (b) of the place in which it was found ; (c) of the date of finding ; and either deposit the treasure in the nearest Government treasury, or give the Collector such security as the Collector thinks fit, to produce the treasure at such time and place as he may from time to time require.

5. On receiving a notice under section 4, the Collector shall, after making such enquiry (if any) as he thinks fit, take the following steps (namely) :

(*a*) he shall publish a notification in such manner as the Provincial Government from time to time prescribes in this behalf, to the effect that on a certain date (mentioning it) certain treasure (mentioning its nature, amount and approximate value) was found in a certain place (mentioning it) ; and requiring all persons claiming the treasure, or any part thereof, to appear personally or by agent before the Collector on a day and at a place therein mentioned, such day not being

earlier than four months, or later than six months, after the date of the publication of such notification;

(*b*) When the place in which the treasure appears to the Collector to have been found was at the date of finding in the possession of some person other than the finder, the Collector shall also serve on such person a special notice in writing to the same effect.

6. Any person having any right to such treasure or any part thereof, as owner of the place in which it was found or otherwise, and not appearing as required by the notification issued under section 5, shall forfeit such right.

7. On the day notified under section 5, the Collector shall cause the treasure to be produced before him, and shall enquire as to and determine :

(*a*) the person by whom, the place in which, and the circumstances under which, such treasure was found; and (*b*) as far as possible, the person by whom, and the circumstances under which, such treasure was hidden.

8. If, on an enquiry made under section 7, the Collector sees reason to believe that the treasure, was hidden within one hundred years before the date of the finding, by a person appearing as required by the said notification and claiming such treasure, or by some other person under whom such person claims, the Collector shall make an order adjourning the hearing of the case for such period as he deems sufficient, to allow a suit being instituted in the civil court by the claimant, to establish his right.

9. If upon such enquiry the Collector sees no reason to believe that the treasure was so hidden; or if, where a period is fixed under section 8, no suit is instituted as aforesaid within such period to the knowledge of the Collector or if such suit is instituted within such period, and the plaintiff's claim is finally rejected; the Collector may declare the treasure to be ownerless.

Any person aggrieved by a declaration made under this section may appeal against the same within two months from the date thereof to the Chief Controlling Revenue Authority. Subject to such appeal, every such declaration shall be final and conclusive.

10. When the declaration has been made in respect of any treasure under section 9, such treasure shall, in accordance with the provisions hereinafter contained, either be delivered to the finder thereof, or be divided between him

and the owner of the place in which it has been found in manner hereinafter provided

11. When a declaration has been made in respect of any treasure as aforesaid, and no person other than the finder of such treasure has appeared as required by the notification published under section 5 and claimed a share of the treasure as owner of the place in which it has been found, the collector shall deliver such treasure to the finder thereof.

12. When a declaration has been made as aforesaid in respect of any treasure, and only one person other than the finder of such treasure has so appeared and claimed, and the claim of such person is not disputed by the finder, the Collector shall proceed to divide the treasure between the finder and the person so claiming according to the following rule :

If the finder and the person so claiming have not entered into any agreement then in force as to the disposal of the treasure, three-fourth of the treasure shall be allotted to such finder and residue to such person. If such finder and such person have entered into any such agreement, the treasure shall be disposed of in accordance therewith ;

Provided that the Collector may, in any case, if he thinks fit, instead of dividing any treasure as directed by this section (a) allot to either party the whole or more than his share of such treasure, on such party paying to the Collector for the other party such sum of money as the Collector may fix as the equivalent of the share of such other party, or of the excess so allotted, as the case may be ; or (b) sell such treasure or any portion thereof by public auction, and divide the sale proceeds between the parties according to rule hereinbefore prescribed.

Provided also that, when the Collector has by his declaration under section 9 rejected any claim made under this Act by any other person other than the said finder or person claiming as owner of the place in which the treasure was found, such division shall not be made until after the expiration of two months without an appeal having been presented under section 9 by the person whose claim has been so rejected, or when an appeal has been so presented, after such appeal has been dismissed.

When the Collector has made a division under this section, he shall deliver to the parties the portion of such treasure, or the money in lieu thereof, to which they are respectively entitled under such division.

13. When a declaration has been made as aforesaid in respect of any treasure, and two or more persons have appeared as aforesaid and each of them claimed as owner of the place where such treasure was found, or the right of any who has so appeared and claimed is disputed by the finder of such treasure, the Collector shall retain such treasure and shall make an order staying his proceedings with a view to the matter being enquired into and determined by a Civil Court.

14. Any person, who has so appeared and claimed may, within one month from the date of such order, institute a suit in the Civil Court to obtain a decree declaring his right; and in every such suit the finder of the treasure and all persons disputing such claim before the Collector shall be made defendents.

15. If any such suit is instituted and the plaintiff's claim is finally established therein, the Collector shall, subject to the provisions of section 12, divide the treasure between him and the finder.

16. The Collector may, at any time after making a declaration under section 9, and before delivering or dividing the treasure as hereinbefore provided, declare by writing under his hand his intention to acquire on behalf of the Government the treasure, or any specific portion thereof, by payment to the persons entitled thereto of sum equal to the value of the materials of such treasure or portion together with one-fifth of such value, and may place such sum in deposit in his treasury to the credit of such persons and thereupon such treasure or portion shall be deemed to be the property of Government, and the money so deposited shall be dealt with, as far as may be, as if it was such treasure or portion.

17. No decision passed or act done by the Collector under this Act shall be called in question by any Civil Court, and no suit or other proceeding shall lie against him for any thing done in good faith in exercise of the powers hereby conferred.

18. A Collector making any enquiry under this Act may exercise any power conferred by the Code of Civil Procedure on a Civil Court for the trial of suits.

19. The Provincial Government may, from time to time, make rules consistent with this Act to regulate proceedings hereunder. Such rules shall, on being published in the Official Gazette, have the force of law.

20. If the finder of any treasure fails to give the notice, or does not either make the deposit or give the security, required by section 4, or alters or attempts to alter such treasure so as to conceal its identify, the share of such treasure or the money in lieu thereof to which he would otherwise be entitled, shall vest in Her Majesty, and he shall, on conviction before a magistrate, be punished with imprisonment for a term which may extend to one year, or with fine, or with both.

21. If the owner of the place in which any treasure is found abets, within the meaning of the Indian Penal Code, any offence under section 20, the share of such treasure, or the money in lieu thereof to which he would otherwise be entitled, shall vest in Her Majesty, and he shall, on conviction before a magistrate, be punished with imprisonment which may extend to six months, or with fine or with both."

A careful study of the above Act would show that in effect it has no purpose behind it. Nowhere the Government, in this Act, claims any right over the treasure trove. The right of the Government over the treasure troves known in the ancient and medieval India, is here totally renounced. If the Government has any intention to acquire the treasure trove, the section 16 of the Act provides the payment of the value to finder and other valid claimants. According to the Act in effect the treasure trove belonged to the finder and the owner of the land; but of the latter to the extent of only 25%; and that too, only if he comes forward with his claim and substantiates it. This Act, thus has laid down a double proceeding for the owner to establish his claim. First to file his claim with the Collector and then to establish it in the court of law. Thus the Act in itself, does not help even to the owner of the land, to whom it seems to be giving help. Even without this Act, if some body feels that the finder of a treasure trove has encroached upon his property, (in the shape of digging out a treasure trove), he has every right to go to court and redress his grievances under civil and criminal laws both. The act has rather complicated the whole thing. For an amount to the extent of 25% of the value of the hoard, the owner has to go through a regular court proceeding, which means, many times more cost than what one would find out of the hoard as his share. So, hardly any owner of the land turns up in a case of treasure trove to claim his share. The ultimate result is that the finder remains the sole owner of his treasure trove find. With this reality, the Act effects no useful purpose and brings unnecessary harassment to the finder.

The Act also does not seem to have been framed in consideration of all the aspects of Indian numismatics and with a view to furtherance of the study of the subject or enriching the museums. It has rather done harm than good. Section 4 of the Act exempts the objects of the value of less than ten rupees from the application of this Act. This has placed most of the treasure troves of the copper coins out of reach of the numismatists and the museums. The value of copper has sufficiently gone up these days, yet, ten rupees would cover very well a hoard of 500 coins. In earlier days, it could cover a hoard of two to three thousand coins. Rarely bigger hoards are found. So, the finders of copper coins were more or less free to do with their finds as they liked. This is one of the apparent reasons that we have few Mughal copper coins in the museums.

The provision of section 16, for acquisition of a treasure trove at the intrinsic value, plus twenty per cent, is also no attraction to the finders. The process of the Act is so lengthy, cumbersome and time-taking that no finder feels encouraged with the allurement of twenty per cent to disclose his find. He finds much more easy to keep his find secret and sell it stealthily in the market and cash the intrinsic value then and there, than to disclose it before the Collector and go through the troublesome proceedings for months and years. It is not unusual to take four to five years in the payment of the value of a treasure trove under the Act. I know of a case of a hoard of silver coins, which was discovered in 1943 and the finder had not recieved his payment upto 1960.

The treasure troves of the coins, that are found every year, thus all do not come to the notice of the Government. Those that come to its notice, are hardly five to ten per cent. All the other hoards go to the bullion dealers and majority of them are immediately melted down. Only the few that survive pass to the coin-dealers and from them to the museums and coin collectors on payment of high prices.

Those hoards that come to the notice of the Government, are not in the strict sense the results of the application of the Act. Truly speaking only few people are aware of the real content and nature of our Treasure Trove Act. Even the men dealing with the treasure trove do not know about it ; and they work under wrong impressions and notions. It is hardly known to the people that the Government has no direct claim over the treasure troves and that if it would take it, it would pay. It is general belief amongst the people and the police officials that the Treasure troves are the

Government property. So, the finder tries to hide it, lest it should be taken over by the Government and he be the loser. In most cases he succeeds. The find of a hoard is known only when there arises some dispute amongst the finders or the members of the finder's family. When a find of a hoard is known, the police jumps, and interferes unduly and takes possession of the trove. In most of such cases, the finder never turns up to claim, for fear of his prosecution and the treasure trove is thus taken possession by the Government as unclaimed. Only in few cases people genuinely come forward to declare their finds under the Act.

The measure to advise the Government about the acquisition of the treasure trove is also not well organised and efficient. After the enactment of the Treasure Trove Act of 1878, there was no guiding principle before the Collectors for the aquisition of the hoards. It was only in 1884, that the Government of India, issued a resolution to guide local (i.e., provincial) Governments in the matter, as the power of making rules under the Act was vested in them. They were advised to frame rules directing that collectors should invariably acquire for government all old coins of not British mintage. They were then to send the coins to the Asiatic Society of the Presidency in which the coins had been discovered for report on the nature of the coins and their numismatic value. Specimens worth acquiring were to be given to certain public collections in specific order and rest sold at the mint.

The instructions that all coins should be acquired was modified almost immediately and discretion was allowed. Since Madras Branch of the Royal Asiatic Society was found practically defunct, the examination of the finds in that presidency was entrusted to the Madras Museum. The Asiatic Society of Bengal was made responsible for examining coins from Bengal, Assam, Bihar, U. P., Cental Provinces and the Punjab and the Bombay Asiatic Society for Bombay. In course of time, U. P., Bihar and Central Provinces arranged the examination of treasure troves in their own museums. What arrangements were made by Assam and Bengal are not known. However, this much is certain that Asiatic Society does not take the examination now. U. P. made a unique arrangement. In 1899, a small committee of persons, known as U. P. Treasure Trove Committee, was constituted from the persons interested in numismatics to examine and report on the finds of that province. Such committee is known nowhere else. The examination of Treasure trove in Bombay (now Maharashtra) has now been entrusted to the

Director of Archaeology of the State, who gets them examined at the Prince of Wales Museum.

In practice, though the coins were being examined by eminent numismatists for these societies and museums, there is hardly any detailed report available of any of the hoards they examined. The published reports are very sketchy and do not serve any purpose of numismatists or afford any information of importance.

In my opinion, the time has now come, when the present Treasure Trove Act should be replaced by a new simple act and an active machinery should be organised for the examination of the Treasure Trove hoards. In doing so, the following basic facts may be kept in mind.

(*i*) Gradual change in the content of rupee from silver to nickel and the rising price of silver has almost brought the coins that were buried in the past a hundred or hundred and fifty years, to the surface. The circulation of the paper currency and the availability of the bank facilities have now eliminated the chances of new burials of the treasures. So whatever treasures would now be exposed, would invariably be those, that were buried more than hundred years back. These facts eliminate the necessity of the long and unnecessary proceeding of the ascertainment of the nature of the treasure trove as laid down in the present Act. So, it should be declared in the new Act in an unambiguous terms, that every thing, of whatever value, found buried under ground in an open land shall be treated as ownerless property. The treasure troves found within a walled compound or a house, may have some different treatment in the Act. In such cases, the owner of the compound or the house may be asked to prove his ownership. Failing that, it should be treated as ownerless.

(*ii*) All ownerless treasure trove should be declared on the pattern of ancient laws and in consonance to the belief of the people, the property of the State.

(*iii*) The finder should be entitled to a cash award, equivelent to the intrinsic value of the treasure, if he brings immediately his find to the knowledge of the State. If he fails to do so, he should be prosecuted.

(*iv*) A further payment upto 20% of the value of the find may be given to the owner of the land, on his claim of ownership being established.

(*v*) The payment of the award money should be immediate. In every state, Grām Sabhā, Grām Panchāyat

or similar local bodies are being established to look after the local affairs. They should be authorised to deal with the treasure troves. The process should be something like this that the finder should bring his find to the notice of the local body within three days. The local body should immediately take possession of the find and make necessary enquiries in the matter, relating the find spot, circumstances of find, the contents of the find, the associates of the finders and make a detailed note of its findings. It should also get the treasure trove evaluated by two goldsmiths or copper dealers, as the case may be, independently of each other and ascertain the metal contents of the hoard and its market value. On the basis of these evaluations, the local body should fix the award, i. e, the value of the treasure trove. That amount should be given by the local body on behalf of the State and the treasure be sent to the District Magistrate or direct to Treasure Trove Authority of the State, which should be established under this Act. The State Government should then pay back the amount to the local body.

The local bodies would be able to know about the finds easily and ascertain the facts without any difficulty and delay and settle the payment. This would expedite the proceedings and give encouragement to the finders. They would disclose their finds without any fears and get cash on the spot; and thus they would have no charm to go to the market. This simple process would enable to secure almost all the hoards that would come to light and would save them from going into the crucibles. This would help the numismatists to know more and accurately about the hoards.

(*vi*) A Treasure Trove Authority should be appointed under the new Act. He should be the numismatist of the State Museum or a numismatist of repute. A Treasure Trove Authority for the entire Republic would be most convenient. The function of this Officer would be to examine the hoards and prepare detailed reports bringing to light all important facts. His report should be published annually. No hoard should be dispersed till one year after the report is published. The hoard should be available to any scholar for examination and study during this period.

(*vii*) One year after the publication of the report, the coins may be distributed to various museums, according to the rules framed by the States. The list of distribution with all details should also be published for the information of the scholars. Each State may publish its own report or a consolidated all India report may also be published.

(*viii*) In case a Treasure Trove Authority for entire Republic is agreed upon by all the States, it would be more convenient to entrust this work to the Numismatic Society of India, with a suitable grants from each State as well as the Central Government, to carry out the work efficiently, under the the supervision of a Director.

I earnestly hope that the problems of the treasure troves would be considered by the Government as well as the scholars carefully in the interest of the advancement of the knowledge and the source material for the history.

COINS WITH LAMINATED FLANS

C. H. BIDDULPH

[Plates I-III]

That certain Indian, Persian and Afghan coins are struck on laminated flans was first noticed by the writer when examining falus issued in the name of Shah Alam II of Machlipatam Bandar (Masulipatam) mint. A falus of the year A. H. 1222 (A. D. 1807/08) with regnal year 47, which had probably been struck by the English East India Company, was the first coin of this type seen.

It is roughly square and has for its flan a piece of copper that has been folded three times. Two opposite ends are smooth, with the other two sides roughly cut and show the folds. The flan had been prepared from a thin strip of copper which had been folded to give the correct thickness for the coin and the bar of metal so produced was cut into roughly square blanks, of correct weight, to receive the hand stamped impressions.

Folding had evidently taken place without heating the copper strips and no attempt appears to have been made to weld the folded metal by hammering after heating. The copper sheets used vary in thickness and seem to have been ordinary commercial sections suitable for the manufacture of domestic articles used in eastern homes.

A second coin of the same mint, with identical date and regnal year, was obtained many months later, but in this instance the metal was thicker and the coin only has a double fold. Both coins are illustrated in **Pl. I. 1 & 2.**

It is not suggested that all the falus of Machlipatam Bandar mint were produced in this manner as very many of them with circular flans of a single thickness, cut from specially prepared billets, or ingots, of copper are found. A coin of this type is illustrated for comparison. **(Pl. I. 3)**

It is suggested that at certain mints facilities could not have existed to form the copper into ingots, or billets, which resulted in the use of thin strips of trade copper folded in the manner described. It is also possible coins were produced by both methods in a particular mint during periods, when for some reason, it had not been possible to prepare the metal as billets from which the blanks could be sliced.

When describing coins issued under the authority of the occupying English forces at Kandahar in Afghanistan, vide *JNSI*, Vol. XXII, Nos. 1 and 2, it was explained that the flans used were of two types, circular and roughly square, and that while the circular coins were of a single thickness, those that were roughly square consisted of three folds of metal. To illustrate as many coins with folded metal flans in the plates accompanying this note, one of the Afghan coins previously illustrated is once more reproduced for easy reference. **(Pl. I. 4)**

As it was thought that flans of thin sheet copper may have been used for coins in Afghanistan by other powers the collection in the British Museum was examined with interesting results.

Falus minted by the Persians during their occupation of Kandahar were quite often struck on laminated flans between the years A.H. 1058 (A.D. 1648) and A.H. 1108 (A.D. 1696) at Kandahar. On checking coins catalogued by W. H. Valentine in *Modern Copper Coins of the Muhammadan States* and Reginald Stuart Poole in *The Coins of the Shahs of Persia*, of approximately the same period, it is seen that Valentine lists seventeen falus and Poole twenty-five, but not all of them have laminated flans. Coins with roughly square flans invariably have either two, three, or even four folds of metal, whereas those with circular flans are cut from billets, or ingots. The British Museum collection has only one coin with a laminated flan, No 129, catalogued by Poole, which is not from Kandahar mint. This coin was struck at Kazwin, a town situated about a hundred miles from Teheran.

From the dated coins previously referred to it is estimated that coins with laminated flans were produced over a period of 40 years approximately.

The coins selected for illustration almost all show folds in the metal on either obverse or reverse. Ordinarily these cut ends are folded in, or occur at the edges, so as to interfere with the designs, or inscriptions, as little as possible and are inconspicuous when this is done. Falus issued by the Persians at Kandahar are illustrated, vide **Pl. I. 5-11** and **Pl. II. 1-4.** One coin, **Pl. II. 4,** with a circular flan is illustrated to show that normal falus were also issued from the same mint.

Generally speaking the sheet copper used by the Persians at Kandahar was very thin and the coins consequently have three or four thicknesses of metal. Only one coin, with a

sabre to the left and floral ornament, **Pl. II. 3**, has two folds.

The history proper of Afghanistan begins with Ahmad Shah Durrani (A. H. 1160-1186., A. D. 1747-1772) who seized the moment when Persia was disturbed by the assassination of Nadir Shah to effect the independence of his country and to make it one of the most powerful kingdoms in the East. (Valentine, W. H., *Modern Copper Coins of the Muhammadan States*).

In spite of the fact that Afghanistan is referred to as one of the most powerful kingdoms in the East with the advent of the Durranis it is seen that laminated flans continued in use for a further period of about eighty years and the output was not restricted to one mint but to no less than five; Bhakhar, Derajat, Kashmir, Multan and Peshawar, in the period A. H. 1160 (A. D. 1747) and A. H. 1245 (A. D. 1829).

Five coins from the British Museum collection with laminated flans from these mints are illustrated, **Pl. II. 5-9**, and described in the key to the plates at the end of the note. The proportion of coins with laminated flans to those without is smaller in the time of the Durranis.

Another coin which must have been current in either Persia or Afghanistan is illustrated as it is unusual in the way in which the metal strip has been folded before the flans were cut from the strip. The coin must be intended to represent an half falus as it weighs 73·4 grains. It has an inscription punched on one side within a circular incuse, the reverse is blank. **(Pl. II. 10)**

Normally cut edges of strips are either folded in, or are arranged so that they are at one or other edge of a coin, or nearly so. In this coin the copper strip has been roughly folded in half and then folded once more and shows two parallel edges of metal on the blank side. In almost all the coins selected for illustration one cut edge is seen on either the obverse or reverse.

I have to thank the Keeper of the Coins and Medals at the British Museum for permission to publish coins in the National Collection, as also for his assistance in the preparation of the casts of coins illustrated in the plates.

KEY TO PLATES, NOS. I & II

Plate I

MACHLIPATAM BANDAR (MASULIPATAM).

1.	Æ.	Falus	A.H. 1222. (A.D. 1807/08)	R.Y. 47.	Three folds.
2.	Æ.	Falus	A.H. 1222 (A.D. 1807/08)	R.Y. 47.	Two folds.
3.	Æ.	Falus	A.H. 1118 (A.D. 1706)	R Y.47.	Normal coin, circular flan.

KANDAHAR. COINS ISSUED BY THE ENGLISH FORCES.

4.	Æ.	?	A.H. 1295 (A.D. 1878)	?	Three folds.

KANDAHAR. COINS ISSUED BY THE PERSIANS.

5.	Æ.	Falus	?	?	? Two fishes & star.
6.	Æ.	Falus	?	?	? ,, ,, ,, ,, (Small thick coin).
7.	Æ.	Falus	?	?	? Stag to left.
8.	Æ.	Falus	A.H. 1085 (A D. 1648)		? Lion to left.
9.	Æ.	Falus	A.H. 1107 (A.D. 1695)		? Lion & Sun to right.
10.	Æ.	Falus	A.H. 1082 (A.D. 1671)		? Camel to left.
11.	Æ.	Falus	?	?	? Camel to right.

Plate II

1.	Æ.	Falus	?	?	? Peacock to left.
2.	Æ.	Falus	?	?	? Peacock to left.
3.	Æ.	Falus	?	?	? Sabre to left.
4.	Æ.	Falus	?	?	? Horse to right, circular flan.

DURRANI COINS.

Ahmad Shah. A.H. 1160-1186 (A.D. 1747-1772).
Bhakhar

5.	Æ.	Falus	A.H. 1162 (A.D. 1748)		? Inscription on obverse and reverse; two folds.

Taimur Shah. A.H. 1186-1207 (A.D. 1772-1793).
Derajat

6.	Æ.	Falus	?	?	? Bird to left; two folds.

Zaman Shah. A.H. 1207-1216 (A.D. 1793-1801).
Kashmir

7.	Æ.	Falus	A.H. 1215 (A.D. 1800/01)		? Sabre to left; two folds.

Muhammad Shah. A.H. 1216–1245 (A.D. 1801-1829).
Multan

8. Æ. Falus A.H. 1235 (A.D. 1819) R.Y. ? Flower and two leaves; four folds.

Aiyub Shah. A.H. 1233–1245 (A.D. 1818-1829).
Peshawar

9. Æ. Falus A.H. 1236 (A.D. 1820) ? Inscription with elaborate border on one side; three folds.

Unidentified Coin.

10. Æ. Half Falus ? ? ? Inscription which could read "Ali Khan" on one side, the other being blank; two folds.

A Post-script :

After submitting the note on "Coins with Laminated Flans", certain others have been added to the writer's collection which have similar flans and are of interest as they carry the date much further back when coins with this type of flan were in circulation.

The earliest coin is Indo Scythian of Vonones with Spalahores- "Herakles and Pallas" type – copper, rectangular in shape and similar to coin No. 379, on page 142 and Plate XIV, in the *Catalogue of Coins in the Panjab Museum, Lahore* by R. B. Whitehead. The territory in which they were current is situated west of the Indus and the period of currency the end of the second century B C.

The coin, which is illustrated on **Pl. III. 3**, has for its flan a thin copper strip, folded once and no attempt seems to have been made to weld the two thicknesses of metal together.

Two other coins, **Pl. III. 1 and 2**, are of the Kushāṇas and resemble R. B. Whitehead's Nos. 207 and 208, under "Miscellaneous", on page 206 of the *Catalogue of the Coins in the Panjab Museum, Lahore.* They are included under Huvishka, C. 150 to 180 A D., and may have been issued during his reign, or at some later date, possibly in the third century A.D. when the Kushāṇas were being forced back into the Kabul Valley and Gandhara, (*PMC*, pages 175 and

176). Both coins have laminated flans, one with three folds of metal and the other a double fold.

A coin of Kashmir of the Muhammadan ruler Fath Shah, who with Muhammad Shah ruled the country for short periods between A.H 886 and 944 (A.D. 1481-1537), with the metal folded once is illustrated, **Pl. III. 4**. The coin is roughly circular in shape and is of copper; see *IMC*, Vol. II, page 192, by Nelson Wright.

Finally, four copper paisas, or falus, of Narwar—a town of great antiquity in Gwalior State. The coins are of the Kachwaha Dynasty and are issued in the name of Shah Alam II. All are roughly square in shape and have two thicknesses of metal. An equal number of circular coins of the same period have flans cut from copper ingots and this points to two methods of manufacture. One coin is illustrated. **Pl. III. 5**, and although it is of comparatively recent date, it is included to make the note as complete as possible with the information now available.

BRITISH INDIAN BROCKAGES, COUNTERMARKED AND DEFECTIVE COINS

C. H. BIDDULPH

[Plates IV–VI]

Coin collecting in recent years has tended towards specialisation due in part to the increased interest taken in it and to the fact that more literature in the form of books and journals of Numismatic Societies is available and finally to the marked increase in the cost of almost all coins. This last factor has perhaps been one of the main considerations which has placed a curb on the general collector.

With specialisation articles in many Numismatic Journals tend to become more technical and restricted in the choice of subjects and the beginner, or general collector, finds there is little to be gained by subscribing to them.

Journals could, with advantage, occasionally have articles of less academic and more general interest, calculated to stimulate less serious collectors, who are not often able to build up advanced collections due to the cost involved and to the fact that they are not able to use the collections and libraries of our museums.

It had been suggested to me that a general paper on certain British Indian coins, which had been collected while building up a specialised collection of the early coinage of South India, may be of interest if it appeared in the *Journal*. The coins are mostly inexpensive and have been collected without much effort and it is thought that by showing what can be done it may stimulate others to collect overstruck, countermarked and other coins, which may not merely have a trivial interest, but actually help in an understanding of the coinage of a country, the historical sequence of its coinage and the reasons which may have prompted the use of its coins by other countries, after countermarking, or overstriking.

The earliest coins of the last category it is proposed to mention in the note are of the East India Company. They are the Rupees and their quarters of the 'Arcot' mint, dated A. H. 1172 (A. D. 1758), with a crown countermarked on them before they were put into circulation in Ceylon in c. 1823/25. They are not illustrated as they are well known and have been described and illustrated in *Ceylon Coins and Currency* by Sir Walter Elliot ; page 165, para 18 (4) and Plate VI. Nos. 166 and 167.

Next in date is the 'Char Pai' copper brockage of the Bengal mint of A. D. 1825. In this instance a reverse brockage is illustrated **(Pl. IV. 1),** which is unusual as most brockages have the obverse struck in the normal manner on one side and incuse on the other.

The only Mule known to the writer in the British Indian series is an interesting coin recently referred to by P. L. Gupta in his Presidential Address at Gauhati, at the 49th Annual Meeting, an account of which is published in the *Journal*, Vol. XXI, Part II, 1959. page 222. The Rupee which should be dated 1835 has for its obverse the normal head of King William IV, but the reverse is that of the Rupee of Queen Victoria of 1840.

Two interesting Rupees, one of King William IV dated 1835 and another of Queen Victoria dated 1891, are illustrated **(Pl. VI, 9 & 11).** They are countermarked in an incuse circle with a crown over the letters P. M. by the Portuguese for use in Mozambique in Africa during a currency shortage.

A coin similar to one of these has been described and illustrated in the *Journal*, Vol. XX, Part II, 1958, page 231 and Plate XIV, No. 12.

Coins selected for description and illustration will be grouped under sub-heads (a) to (j) with short notes to explain some of the defects.

(a) Brockages.

(b) Obverse only, with a blank reverse with a few indistinct letters (incuse).

(c) Obverse and reverse blank (not illustrated in the Plates).

(d) Off Centre.

(e) Double Struck.

(f) Defective Coins.

(g) Defective Coins with double impressions.

(h) Double Obverse.

(i) Mules.

(j) Countermarked for use outside India.

(a) Brockages

It may appear from the number of brockages illustrated that they are fairly common. This is really not so as most defective coins are detected in inspections carried out before

coins leave the mint. Brockages occur due to the lifting, by the machine, of a normal coin after it has been struck, and in the next downward stroke the coin that has been lifted acts as the top half of the die and stamps the next blank flan with an incuse of the obverse on the side which should normally receive the reverse impression from the die. While this occurs on the side which should have had a reverse impression, the under side of the flan receives a normal embossed head from the bottom half of the die, fixed in the machine.

This would seem to occur very infrequently,, for only a single coin at a time, as it is not likely the coin that had been accidentaly lifted would remain in position and produce others. Brockages invariably have two obverse, but reverse brockages do occasionally occur and suggest the reverse half of the die had been fixed in the bottom of the machine.

Normal brockages are illustrated on **Pl. IV, 1-9**, **Pl. V, 1-4** and **Pl. VI. 10.** Two reverse brockages are also illustrated. **(Pl. IV. 1 & 6)**

(b) Obverse only with a blank reverse with a few indistinct letters (incuse).

These can only be explained as incomplete brockages by the coin that was lifted becoming dislodged while the machine was making its downward stroke which resulted in the blank flan not being impressed with the complete incuse impression, as in an ordinary brockages, but with only a portion of the marginal inscription. The blow from the machine would be delivered on a falling coin which had possibly twisted, resulting in the spread of the letters which appear larger than on the die. Only one coin of this description has come into my possession. **(Pl. IV. 10)**

(c) Obverse and Reverse Blank.

Not illustrated in the plates. They have been found with or without milling and the denomination which occurs most frequently is the quarter rupee, of which I have many with both security milling and the later nickel coinage with straight milling of King George VI. Only one Rupee with security milling has come into my possession. They are easy to explain as they have only missed the final operation in which the obverse and reverse impressions are applied. It is not quite so easy to explain how they so frequently escaped the rigorous checks before despatch from the mint.

As this defect has not been noticed before the reign of King George VI, in whose reign all the coins of this

description in my collection occur, it is apparent some special reason existed to account for them.

During the period of the Second World War all coins, especially those of lower denomination, were required in excess of normal requirements for a variety of reasons, one of the most obvious being for payments to the troops in India. Mints must have had to work longer hours and the added strain may, in part, have been a contributary factor in explaining the many defective coins which were found in circulation. Support for this supposition is found in a news item in the *Madras Mail* of Wednesday 30th May, 1945, an extract from which is reproduced :

> *"A demand met. Night Shift at Mint no longer needed. Bombay. May 28.*
>
> The management of His Majesty's Mint, Bombay, is considering the question of discontinuing the night shift, Col. A. J. Ransford, Master of the Mint, told the press today. Night shifts had been in force since 1940 to meet the heavy demand for small coins. That demand no longer existed and hence the question of discontinuing the night shift was engaging the attention of the authorities."

Defects under sub-heads (*d*), (*e*), (*f*), and (*g*) can all be attributed to the same causes as have been mentioned under item (c). All the defects cannot be attributed to the two World Wars, as will be seen from some of the dates on the coins, but it is noticeable that quite a large number did occur during the period of the Second World War. The rupee, **Pl. V. 5**, is an extreme case of a coin which escaped detection at the mint and passed into circulation.

A few coins under most of the sub-heads (d) to (g) are illustrated and will be referred to in the key to the plates at the end of the note.

(h) Double Obverse.

Coins of this description are invariably suspect and are usually produced by either splitting or filing down, two coins and joining the obverse halves and providing a new milled edge. These are easily detected and are only of use to conjurers and others accustomed to sharp practices requiring a coin to be tossed as part of a deal or transaction.

It is difficult to account for a genuine coin of this description as it would seem that in order to minimise the risk of wrongly setting up the two halves of a set of dies in

a machine, the blocks containing the two halves would be of different shapes. This cannot always be the case as the coin **Pl. VI. 4,** is a genuine rupee of King George VI with a security milled edge and could only have been produced by fixing two halves of the obverse die into the machine.

The coin was exhibited at a meeting of the Royal Numismatic Society, London, and one of the members pointed out that the head on one side was not quite as clearly defined as on the other. This would suggest, that for some reason, a new set of dies had been issued for a machine, before withdrawing those in use, and that either intentionally, or by inadvertence, the used obverse half of the die was not removed and the machine was provided with a new obverse in the position normally occupied by the reverse half of the die. Only by such an arrangement could the coin be explained as in all other respects it is genuine It was accepted in payment of a fare at a railway station in South India and was detected at the Central Cash Office of the administration. The circumstances of its production may have been questioned had the coin been offered for sale by a dealer, or collector, for a sum considerably in excess of its normal value.

(i) Mules.

Coins struck with odd halves of dies of either different issues of the same country, or of two countries, which occasionally occurs in mints which undertake the manufacture of coins for more than one country. They have been mentioned earlier in the note when reference was made to an unusual rupee of King William IV with a reverse of a rupee of Queen Victoria dated 1840.

(j) Countermarked for use outside India.

Countermarked rupees of King William IV and Queen Victoria were used in the Portuguese territory of Mozambique in Africa during periods of currency shortage in the area. The countermark has been referred to in the *Journal*, Vol. XX, Part II, 1958, page 231 and a rupee of Queen Victoria illustrated on Plate XIV, No. 12. Information given by the mint at Bombay has been furnished in the note with a description of the countermarks used in the territory.

Rupees of King William IV are known to have been countermarked in the year 1888 and those of Queen Victoria in 1895. **(Pl. VI 9 & 11).**

All the coins described and illustrated are in the writer's collection. There are many others which could have been

included, under one or other of the defects mentioned, but in order to reduce the number illustrated in the plates they have been omitted.

KEY TO PLATES NOS. IV, V & VI

Plate IV

BROCKAGES.

1.	Æ.	Four Pies.	Bengal Mint.	Dated A. H. 1210 on reverse and A. D. 1825 on obverse. A rare reverse brockage.
2.	Æ.	Half Anna	Bengal Mint.	Dated A. D. 1845.
3.	Ar.	Rupee		A. D. 1840. With continuous inscription over the Queen's head on the obverse.
4.	Ar.	Rupee		A. D. 1840. With divided inscription on either side of Queen's head on obverse.
5.	Ar.	Rupee		From A. D. 1862. Inscription reading "Victoria Queen". Rupees with this date were issued following the Indian Mutiny when the East India Company surrendered its authority to the Crown.
6.	Ar.	Half Anna		A. D. 1862. A rare reverse brockage.
7.	Ar.	Rupee		From A. D. 1877. The Queen was proclaimed Empress of India in the year 1877.
8.	Ar.	Rupee		From A. D. 1903 to 1910.
9.	Ar.	Rupee		From A. D. 1911 to 1936.
10.	Ar.	Rupee		From A. D. 1911 to 1936. An unusual brockage which has been dealt with in the text.

Plate V

1.	Æ.	One Pice	A.D. 1862 to 1876. See remarks against item 5.
2.	Æ.	One Pice	A. D. 1862 to 1876. See remarks against item 5. This coin is unusual in being both a brockage and off centre.

3.	Æ.	One Pice	A.D. 1877 to 1902. See remarks against item 7.
4.	Æ.	Half Rupee	From A. D. 1911 to 1936. The writer also has a brockage of a pice of King George V.
10.	Æ.	Quarter Rupee **(Pl. VI. 10)**	A. D. 1840. Divided inscription. Brockages in coins smaller than the half rupee and pice seldom occur.

DEFECTIVE COINS.

5.	Æ.	Rupee	From A. D. 1911 to 1936. An interesting coin which could be called a double strike, except that there is no evidence of a double strike on the obverse which only shows a partial spreading of the design of the original obverse. How such a coin left the mint requires some explaining.
6.	N. I.	Half Rupee	A. D. 1946. Milled edge. Nickel.
7.	N. I.	Quarter Rupee	A. D. 1946. Milled edge. Nickel.
8.	N. I.	Quarter Rupee	A. D. 1946. Milled edge. Nickel.
9.	B. R.	Two Annas	A. D. 1944. Brass.

DOUBLE STRUCK.

10.	Æ.	Rupee	A. D. 1862
11.	B. R.	Two Annas	A. D. 1943. Brass.

Plate VI

OFF-CENTRE.

1.	Æ.	Rupee	A. D. 1862.
2.	Æ.	Rupee	A. D. 1904.
3.	Æ	Rupee	A. D. 1912.
5.	Æ.	Half Rupee	A. D. 1942. Security edge.
6.	Æ.	Quarter Rupee	A. D. 1945. Security edge.
7.	N. I.	Half Rupee	A. D. 1946. The coin has not been provided with any milling.
8.	B. R.	Two Annas	A. D. 1944. Brass.

DOUBLE OBVERSE.

4.	Æ.	Rupee	Security edge. It has been dealt with in the text.

COUNTERMARKED FOR USE OUTSIDE INDIA.

9.	Æ.	Rupee	A. D. 1835. Believed to have been countermarked in the year A. D. 1888 with a crown over the letters P. M. in an incuse circle.
11.	Æ.	Rupee	A. D. 1891. Believed to have been countermarked in the year 1895 with a crown over the letters P. M. in an incuse circle.

THE DETECTION OF COIN FORGERIES IN N.W. INDIA*

H. de S. SHORTT

Foreword

The following notes were written in 1946 soon after my return from India. It has been suggested that they may have the effect of deterring would-be collectors of this series. This was not, of course, their intention, and I do not think that any collector worth his salt would be so easily discouraged, though by dwelling on forgeries their frequency may appear to be exaggerated.

The points I have tried to explain still seem to me worth recording, but I have since learnt to call the larger silver coins of the Indo-Greek series tetradrachms instead of didrachms, and the smaller, drachms, instead of hemidrachms.

The country where I collected is now Pakistan, so the title of this paper must be taken in the sense of physical rather than political geography.

* * *

Experience is apt to cost so much that only the richest or the most determined collectors overcome the first disagreeable taste of it. This is particularly the case with coin collecting in N.W. India where the Indo-Greek series is most easily found and is usually the most attractive to a European collector. But from the start his difficulties are very great. Apart from a useful handbook by C. J. Brown, *The Coins of India*, 1923, literature on the subject is either prohibitively expensive or quite unobtainable. This is regrettably the case with the three principle catalogues, those of the British Museum, the Indian Museum, Calcutta, and the Punjab Museum, Lahore; and owing to recent finds even these great works are largely out of date. Secondly, he is confronted by a skilful army of forgers with a fifth column in the dealers of the city bazaars, who appear to have a monopoly of the trade, and to whom therefore he must resort with delicate step and a handkerchief to his nose or smoking some strong tobacco. An illustration will shew that the following notes cannot be a solution to the problem, but only a guide to collectors, by which disappointment and a waste of money can be lessened.

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In 1944, two didrachms of Hermaios came into the hands of M. Shakur, the Curator of the Peshawar Museum. He had seen them being made, as he said, in Utmanzai, a village not far away, in Mardan District. These two forgeries were given to me, and as they seemed genuine they were shewn, first to some local dealers, whose knowledge of forged coins is of necessity considerable, and afterwards to experts in England. All gave it as their opinion that the coins were genuine. One of the dealers remarked that there was no one in Utmanzai capable of forging coins, and that in any event no one would waste his time in forging such a common type—genuine specimens can be bought for about Rs. 5/-. The curator has since confirmed his statement in writing :

"As regards the two didrachms of Hermaios," he writes, "I assure you once again that they are forged coins. How they are cast, I shall tell you presently. A mould is prepared of clay in disc forms. A coin is pressed on two separate clay discs for taking impressions of both the obverse and the reverse. The coupled faces of contiguous discs bearing the negative impressions of the obverse and the reverse respectively are so placed as to make the opposing coin sockets coincide exactly. They are plastered over with clay, only a funnel-like crater being left at the top for receiving the molten metal. The coins under reference were seized while they were still hot in the moulds. What actually happened then was that in my presence the moulds were broken and the coins taken out. There was some additional metal in the funnel attached to the coins which was clipped and the edges of the coins then smoothed with a file I wish I could have prevented the silver-smith's doing away with the additional metal, which appeared exactly like I said. This would have given you a further proof of their being forgeries. Even the late Alexander Cunningham has admitted that coin-dealers in Rawalpindi and on the frontiers of India are past-masters in producing forgeries and they can easily deceive the experts. Therefore I am not surprised to know from you that British authorities have also declared the two didrachms as genuine. However, I inform you once for all and for the information of all numismatists that the two coins of Hermaios I presented to you in Peshawar are not genuine but forgeries."

That is the problem at its worst and apart from the possibility of detecting cast from struck metal by X-ray, perhaps there is no answer to such an extreme case. Furthermore the collector cannot carry elaborate apparatus about with him. He must make his decision quickly and, in most cases, on the spot.

The obvious method of learning about an individual coin is to examine it ; but external evidence should be considered. In this regard the provenance of the coin is important. Dealers vary in degrees of honesty and dishonesty, so that the first injunction must be to know your dealer. But remember that though honest he may himself be deceived, so that the more he can tell you about the origin of the coin the better. If he says it comes from Peshawar or Kabul, suspect it at once. If he can name the farmer in some village, such as Swabi or Fatehjang, who found it in his fields, the ground is much surer.

The price which the dealer asks naturally follows. He may agree to accept half his original demand if you can afford time to reason with him, but if a rare coin is offered very cheaply, it is at once suspect. Against this it should be stated that a coin for which a dealer will accept the equivalent of £4 in India, e.g. a didrachm of Menander, may be priced at £25 by a London firm This is no place to go into the relative varity of Indo-Greek coins, but one may say broadly that apart from a number of bronze coins and silver hemidrachms, notably those of Menander which are to be had at about Rs. 2/-, or three shillings each, the coins are comparatively rare and correspondingly expensive.

The probability of forgery must be taken into account. The process, whether of striking or casting, costs time and money, so that the counterfeiter will not normally reproduce the commoner varieties, and if he should attempt to copy the commoner gold coins of the Kushāṇas in a base metal, the difference in weight would quickly lead to his being discovered. Strictly speaking, only one gold coin is at present known in the series properly termed Indo-Greek. This is a stater of Menander, and it does not so far appear to have been forged.

Given the opportunity, the opinion of other dealers or collectors is, of course, helpful, but experience shows that the opinions will often disagree and should be given weight according to their merits.

Before dealing with the internal evidence of authenticity, it should be made quite clear what is meant by a forgery, remembering that ancient coins, especially in India, were often cast as well as struck and that modern forgeries are sometimes struck as well as cast. A forgery may be modern, or it may be almost contemporary with its prototype. In the Taxila Museum are ancient clay moulds for forging the "elephant and caduceus" bronze coins of Maues and the billon

didrachms of Azes, while even "modern" forgeries were made in the Punjab as much as a hundred years ago. Forgeries may be "official" or "unofficial"; that is to say they may be issued by government authority, either plated or in base metal with the object of replenishing the treasury by withdrawing good coin, or they may be made by a private individual for his own benefit. Finally they may be copies of known types or they may be new types, either entirely new or new combinations of known obverse and reverse types.

A coin, then, is a forgery, if it is made with an object to deceive.

R. B. Whitehead in a recent paper in the *Numismatic Chronicle* has pointed out that the Indian goldsmith with his limited education and skill is unlikely to produce a forgery with new types which would have the least hope of deceiving a collector. For the same reason, modern forgeries will usually be cast Struck specimens exist, but very little experience will show differences in style from the genuine coin. This is particularly so in the lettering. The Greek die-sinkers always made the strokes of their letters like a two-ended drumstick— with the object, perhaps, of achieving regularity. If these blobs are missing, the coin falls under suspicion, even though it be die-struck.

The dealer or the expert will normally assess a coin on his first impression, but as this impression is the sum of his experience, the method is of little use to an amateur, who will need to study the coin in detail, keeping an open mind until he can form a verdict on all the points noted. Even the ability to reserve judgment requires practice.

Happily it was the habit of the Greeks in India and their immediate successors, such as the Śakas and the Kushāṇas to strike their coins, and not to cast them, and as modern struck forgeries are easily recognised and have already been mentioned above, these notes will deal with cast forgeries, with the one exception of certain plated coins.

The general appearance and feel of a coin are both important. A cast coin nearly always shews a suspicious glossiness and feels distinctly soapy. A dealer will often make his decision by moving finger and thumb over the surface. It stands to reason that a modern forgery cannot bear the hard patina which if produced by the passing of centuries is almost as hard as the metal itself. Although colour and dirt may be applied by the forger, they are easily

removed in water and bright metal is seen below. Even if it were desirable to remove true patina, it would be extremely difficult to do so, as it is, in fact, a part of the coin.

Examine the field of the design. In the series under discussion this should be quite flat. The ancient dies were seldom faulty, but moulds have a tendency to unevenness. Therefore if the field is uneven or bulges towards the rim, the coin is doubtful. An exception is where the metal has spread beyond the edge of the die, and in this case the reassuring mark of the die-edge will appear on the inner side of the bulge.

More can be discovered from the field. If cast, and not touched up, this appears to be frosted or, under a strong glass, pitted, while larger pittings are visible, especially in bronze, due to air-bubbles in the mould. The finer pitting is the effect of the metal cooling without pressure. Struck metal often exhibits a fine grain, due to imperfect heating, which would certainly be lost if the metal were sufficiently heated to be poured into a mould. In this connection one word of warning is necessary. Occasionally it happens that chemicals in the ground corrode the surface of a coin, and a dealer then cleans it. The result is often difficult to distinguish from casting, but the other side of the coin may have escaped corrosion, or if it has not, other symptoms should be present to decide the case.

A die-struck coin, unless badly corroded or worn, will shew clear-cut lines round the type and the lettering, while in a cast coin these will be lost in a gentle merging with the field. A good magnifying glass should decide the point in most cases, though several doubtful instances prove that extreme care is necessary. An example of this is a square bronze coin of Zoilos Dikaios, shewing on the obverse the head of Herakles and on the reverse a club and bow in a case, surrounded by a wreath. It was a beautiful coin in good condition, shewing no signs of patination. It was also very rare, which should have made one suspicious, but the lines seemed perfectly clear cut and even the grain of the metal seemed to be present. Shortly after this coin came into my possession a dealer produced a second, and a third was in the cabinet of a well-known collector in India. This would not be unduly remarkable not yet the fact that all three coins originated from the same dies, but they also had the same flaws on the rim and the same degree of eccentricity. Now by the ancient method of coin making without any form of collar it is most improbable that two coins, even from the

same die, should be struck with identical margins on the flan, and almost impossible that they should have the same flaws on the edge. The British Museum afterwards confirmed that my coin was a forgery. The dealer was probably himself deceived by his specimen, and admitted after seeing mine that it must be a forgery, but the well-known collector is still convinced that he has a rare and genuine coin.

The lettering of cast coins is often metal-filled and coins with this defect are best left alone. This is a good guide and so also is the presence of small cracks round the rim, caused by the sudden expansion of the metal under pressure. This cannot be reproduced in a cast, which tends to gloss over the minor defects of a die-struck coin. Evidence of double-striking is also a reassuring sign. This is a very common fault in genuine coins of the Indo-Greek series, but the first strike is so nearly obliterated by the second, that all traces of it would be lost in a cast copy.

Just as the edge of a coin is often conclusive in proving it genuine, it is often very helpful in detecting a forgery. A mould is made of two pieces of clay joined together at the circumference of the impression, with a small aperture where the metal will be poured in. Naturally enough this junction will usually be imperfect. There will, in the first place, be a slight seam or ridge appearing on the cast, and secondly the two half-moulds may not perfectly coincide, giving the effect in the cast of two coins placed eccentrically one over the other. Finally, as Shakur has described, a funnel of metal will remain where it was poured into the mould. The counterfeiter must doctor his cast in order to remove these defects and the shortcomings of his work are often evident. Therefore, beware of a coin which shows the marks of a file or of any cutting or burnishing of the edge. These marks may be very fine and even invisible to the naked eye. Likewise a coin on which the obverse and reverse types are partly surrounded by a depressed area between them and the edge of the coin is most suspicious. These areas will be at opposite ends of the coin, as would result from the sticking together of two halfpennies, which did not perfectly coincide. In this respect, an examination of the outer edge of the lettering is often helpful, if it touches the edge of the coin at any point. If the coin be struck, the ends of the letters will stand up on a level with the edge of the coin and at right-angles to the field. If the coin be cast, the strokes of any letters which touch the edge will be rounded, or will lie back at an angle from it. This

indication cannot of course appear if the types be placed centrally on the flan, so that the legend in no place touches the edge of the coin.

Occasionally a counterfeiter may resort to marking the surface of his cast in order to give the impression of wear, or to cover up evidence of forgery. This is not a common practice in India and should it be present, will not deceive a careful observer. Similar marks may also appear by accident on a genuine coin.

Official forgeries must now be mentioned. They are of two kinds, both struck from the original dies, but one is plated and the other is in base metal. They do not occur in bronze. A didrachm of each kind is in my collection and neither has any ring. An ordinary cast forgery may ring as soundly as a genuine coin. The plated coin has a slight crack on the neck of the bust ; it is also slightly thinner and larger than a normal coin, though it is hard to give any reason for this. Should this type of forgery be well worn, the base metal core, may be exposed, but this is seldom the case, and many such fakes must go undetected. The base metal forgery was only detected by the lack of ring, a slight lack of weight and—after cleaning—an appearance of base metal. A cleverer production would be difficult to spot, and in fact the border-line between official forgery and authenticity is very ill defined

There remain certain features which in my experience are of little practical assistance. The sound of the metal has already been mentioned as being no guide of modern casts. The size of the coin, both in diameter and thickness, is also of small distinguishing value, for though a cast may differ in both respects from its original, the originals themselves are apt to differ according to the pressure of the striking. The same applies to weight as although Indo-Greek coins were minted according to Indian standards of weight, the honesty, skill or accuracy of the moneyers varied, while corrosion and wear also take their toll of the original weight. The fineness of silver varies considerably even in the issues of a single ruler, while modern casts are often made in fine silver, so that the colour of the metal must also be rejected as a useful guide to authenticity.

Mistakes in spelling should not be taken as proof that a coin is false, even when occurring in the Greek legend with which the engravers were probably familiar. In my collection is a genuine didrachm of Strato and Agathokleia with the

reading "ΑΓΑΘΟΚΛΕΟΥΣ" for "ΑΓΑΘΟΚΛΕΙΑΣ" and another of Hermaios reads "ΕΡΜΑΡΟΥ" for "ΕΡΜΑΙΟΥ." Mistakes of this kind are more than likely to occur in modern struck forgeries, but for other reasons already discussed these should not be difficult to detect.

To sum up, forgeries may be of two periods, ancient and modern. Ancient forgeries may be divided into three classes : two of them, plated and base metal coins, issued by the mints, and the third, casts of coins, then current, made by local manufacture. Modern forgeries are of two classes: the first, cast copies of original coins and the second, struck copies from forged dies.

The following table may help to clarify the points which have been mentioned.

Table

CHARACTERISTICS	Genuine Coins	FORGERIES				
		ANCIENT			MODERN	
		Plated	Base Metal	Cast	Struck	Cast
1. Soapy surface	−	−	−	±	−	+
2. Effects of corrosion	+	+	+	+	−	−
3. Flat field	+	+	+	−	+	−
4. Frosted surface	−	−	−	±	−	+
5. Clear-cut type	+	+	+	−	+	−
6. Pitting	−	−	−	+	−	+
7. Doctered edge	−	−	−	−	−	+
8. Metal-filled letters	−	−	−	+	−	+
9. Resonance	+	−	−	+	+	+
10. Surface cracks	−	+	−	−	−	−
11. Mistakes in legend	±	±	±	±	±	±
12. Peculiar style	−	−	−	−	+	−
13. Double striking	+	+	+	−	−	−
14. Drum-stick lettering	+	+	+	+	−	+
15. Extra large flan	−	+	−	±	−	±
16. Extra thin flan	−	+	−	±	−	±
17. Bad colour	±	−	+	+	−	−
18. Cracks on the edge	+	+	+	−	+	−
19. Patina	+	+	+	+	−	−
20. Grain in the metal	+	−	−	−	−	−

\+ means that a characteristic is likely to be present.

− that it is unlikely to be present.

± that if present, no inference can be drawn from it.

* * *

A Post-script (dated 12th July, 1961)

I think the foreword explains the booklet to some extent and corrects one or two matters of nomenclature. The notes were written without reference books, and some of the things that I said sound to me now rather naive and dated. In particular this might be said of the prices I have quoted on page 168. However there are two points of fact which I think ought to be put right if these notes are to be re-printed. On page 167, I mention two coins of Hermaios which I had been told by Shakur were forgeries. In spite of what he wrote to me, and which I quoted, I now have no doubt that, while one was a forgery, the other was perfectly genuine. In fact having had rather more experience now than I had then, I don't think I should have much difficulty in making a similar decision today. In 1950 I corresponded with John Marshall on the subject and submitted these two coins to him. His reply was as follows : 'Thank you very much for giving me an opportunity of seeing the two Hermaios didrachms, which I return herewith. I have marked these *A* and *B* on the envelopes. *A* is obviously a cast forgery, and a poor one at that. *B* is a genuine struck coin but the lettering of the obverse has been damaged by heat. This might easily have happened, if the forger was using it for his matrix and left it by accident in the matrix, when the latter was into the kiln. Mr. Shakur said that he saw the forger take the coin from the matrix, when the latter had cooled. Or the forger may accidentally have left the coin on the furnace, the heat from which may have melted the surface of some of the letters without damaging the rest of the coin. And as the coin was of little value, he may have amused himself by palming it off on Mr. Shakur as one of his own forgeries. Whatever happened, I am quite satisfied that this didrachm was not cast by any Indian forger."

The other point which needs correction concerns a "plated" coin mentioned on page 172, where I remarked that it has a slight crack on the neck of the bust, etc. I am now satisfied that this coin is perfectly genuine and of solid silver, so all my remarks about it should be discounted, including characteristic no. 10 in the table.

MINTS AND MINTING IN INDIA

UPENDRA THAKUR

The evolution of currency was one of the most significant revolutions in th heistory of mankind that changed the face of the economic world, though it was a slow and long process. This evolution passed through the different interesting phases of the gradual evolution of human civilization.

The origin of the coins is to be traced to the steady growth and development of the method of exchange, on which the economy of the primitive men depended. The method of exchange of the primitive men was virtually confined to barter, which most probably arose from the practice of "mutual propitiation of gifts" and gradually the idea that "the present received should be of like worth with that given" was established; and exchanged articles in course of of time lost "the character of presents".[1] The system of barter had advantages and disadvantages both; but notwithstanding all the difficulties, it was the earliest means of carrying on commerce. This system is to be seen in India as late as the age of *Dharmasūtras*, the Pāli canons,[2] Gautama and Vaśishṭha.[3]

In the next stage, the necessity was felt to use certain commodities of general value as the standard media of exchange. This medium, in course of time, expressed itself through extraordinary shapes and varied according to the class within which it circulated. Amongst the Vedic Aryans cows were the appropriate measure of value Horses suited better to the military class.[4] In the *Mahābhārata*[5] a teacher's fee is mentioned as 800 steeds of the best breed. In the agricultural stage, agricultural products, particularly the staple corn were used as currency. The *Jātakas*[6] mention slaves, rice and other food grains as the media of exchange. With the development of commerce, articles like garments, coverlets and goat-skins became the media of

1. Spencer, *The Principles of Sociology*, pp. 99-100.
2. *Cullavagga*, VI, 9.1.
3. VII, 16ff.
4. Pāṇini. II, 37 ff.
5. *Mbh.* III. 195.9; V, 106 11.
6. *Jātaka* (ed. Fausboll) I. 124 ff.

exchange.[1] Pāṇini has mentioned some interesting devices like *kaniṣa*, *śūrpa* and *khārī* (i. e. grains of these measures)[2] and has testified to the use of cows (*go-puchchha*)[3] and pieces of cloth (*vasana*) as the measures of definite value.[4]

Then came the metals as the media of exchange. At this stage, metals were weighed in scales and given for the purchase. Different standards were used for gold, silver and copper: and all these were based on the weight unit of *guñjā* berry, which was also called *raktikā* and *kṛishṇala* (approximately 1.8 grains).[5] The metals worked into ornaments, later became the units of exchange with the development of the notion of the "unit of value", which revolutionised the structure pattern of trade, economy and the government.

Thus, it appears that the coins, as known in terms of modern connotation, had taken their shape in India by the seventh century B. C. These earliest coins are now known as the "punch-marked" coins (*āhatamudrā*). They are pieces of silver; though irregular in shape, they are of definite value and bear bold stamps of marks, struck from different punches. In these symbols they had the guarantee of the issuing authorities as regards the quality, purity and weight of the metal representing thereby a definite value that obviated all the difficulties, inherent in the earlier metallic currency.

I

Scholars generally believed that the early punch-marked coins were the private issues of the moneyers and traders.[6]

1. Pāṇini, II, 37 ff.
2. Ibid.
3. Ibid., *Go puchchha* was the term used in the transactions done with cow (*JNSI*, X I, p. 190).
4. Pāṇini, II, 37 ff.
5. A. N. Bose, *Social and Rural Economy of Northern India*, II, p. 357; Coins were also some times made of lead (*e. g.* reference to lead *Kahāpana* in the *Nidānakathā*), nickel (of Indo-Greek kings, Kshudrakas and Mālavas), potin (Āndhra-bhṛitya kings) and some times *māsakas* of wood, bamboo, palm-leaf, or lac passed current if they bore the requisite impression of *rūpa* (Cf. Buddhaghosha).
6. For different views, see Smith, *CCIM*, 133; Bhandarkar, *Car. Lec.* 1921, pp. 98 ff; *ASI, AR*, 1905-06, p. 153; 1913-14, p 220; Centenary Supplement to the *JRAS*, 1924, p. 175; *JASB*, 1934, *NS*. No. XLV, 5ff; 1937, *NS*. No. XLVII (Durga Prasad's article); *JNSI*, II, 29; A.K. Narain in *JNSI*, XIX, pp. 97ff; Dani in *JNSI*, XVII, pp 27-32 & *Alt. Com. Volume*, 1960, pp. 1 ff.; M.M. Singh in *JNSI*, XX, pp. 114 ff.; Mrs. Rhys Davids in *JRAS*, 1901, p. 877 etc.

But the extant specimens have now convinced them that none of them were private issues and they were issued by the States.[1] We, however, find that in spite of the fact that the commercial community would have very much benefitted by the issue of these State coins, they were very suspicious about them. They did not rely entirely on the State-stamps on the metallic piece. They thought it better to test for themselves and put their own marks thereon. This we find in the form of minute marks, scattered all over the flan of these early coins. It seems, merchants and money-changers, put their own minute marks, to testify their worth, whenever the coins passed through their hands.

That the traders and merchants had ever issued their own coins, is not testified from any literary source. Undoubtedly there are a few pieces found in the region of Taxila, which bear the words *negama*. They are of much later date,[2] and tend to suggest that they were issued by the guilds of merchants. But scholars very much differ about their attribution. Jayaswal believed that the *negama* coins were issued by the State for the association of the city merchants;[3] Bhandarkar suggested that on these coins, the term *negama* stands for City States.[4] Recently, Lallanji Gopal interpreted these coins as having been issued by the *niyamas* as the authority incharge of a particular city.[5] But the available specimens of this coinage are only few. It is not unlikely that they were issued by the *niyamas* for transactions between themselves and their customers, as we have instances of tokens issued by business firms in many western countries. From archaeological sources also, we have nothing so far to suggest that merchants were issuing coins in India. Yet it is not unlikely that there were traders' currency in this country prior to the introduction of the State coinage and they were the precursors of the latter.

We do not know how the currency and the mint were regulated by the State prior to the Mauryan period. By the time of Kauṭilya's *Arthaśāstra*, however, they had come under the most rigid control of the State. The minting of the coins was now the sole concern of the State. The Suprintendent of the Mint (*lakshaṇādhyakṣha*) was authorised to issue coins on behalf of the State. Persons making counterfeit coins or using

1. Spooner, *ASI, AR*, 1905-6, pp. 150-55; Bhandarkar, *ASI, AR*, 1913-14, p. 210.
2. *BMC, AI*, intro.
3. *Hindu Polity*, p. 254.
4. *Carmichael Lectures*, p. 175.
5. *JNSI*, XXII, p. 42.

them were heavily punished. Spies were appointed by the State to hunt after the manufacturers of counterfeit coins; and when any counterfeiter was detected, he was banished from the State.[1] The State also excercised a general supervision and control over the media of exchange. A State officer named *Rūpadarśaka*, mentioned in the *Arthaśāstra*, regulated the currency.[2] There was a well developed science of coinage and currency known as *Rūpasutta*. Buddhaghosha in his note on *rūpasutta* advises a learner to turn over and over many coins. This clearly indicates that it was an applied science and much of the knowledge could be derived empirically. The science, in all probability, treated of (i) the metallic composition of coins ; (ii) their shape and technique ; (iii) their devices and places of manufacture and circulation ; (iv) the mint ; (v) the offices connected with the manufacture of coins and regulation of currency ; (vi) detection of counterfeit coins ; and (vii) making a revenue by inflation and sophistication. This science was considered as the subject of serious study not only for a tradesman but also for the princes for the reason of proper administration.[3]

Unfortunately no text of any *Rūpasutta* is now extant; but an idea of it can be had from a very late text of similar nature called *Dacca-parikkhā*, a work by Thakkura Pherū who was the mint-master of Delhi mint in the times of the Khilji Sultans. It deals in detail with the metallic composition of the coins and their value.

What devices were used in an official mint in ancient days is nowhere described; but incidently Kauṭilya gives a list of things that were used in a counterfeiter's atelier. Obviously, the same things would have also been used in the State mints. They are: various kinds of metals (*loha*), alkalis (*kshāra*), charcoal (*aṅgāra*), bellow (*bhastra*), clipper (*saṁdaṁśa*), hammer (*mushṭika*), anvil (*adhikarṇī*), crucibles (*mūsha*) and dies with designs (*bimba-ṭaṅka*). With these things, the process of minting coins may well be visualised. The metals were first melted in crucibles and purified with alkalis, then hammered into sheets and finally cut into pieces and stamped with the *bimba-ṭaṅkas*

The punch-marked coins bear only various kinds of symbols and have no inscriptions. So, it is very difficult to know about them in any detail. These coins have been found scattered all over the country and their hoards, so far known,

1. *Arthaśāstra*, II, 12 ; IV, 1.
2. Ibid., IV, 4.
3. *Carmichael Lectures*, p. 166.

exceed hundred.[1] The analysis of their distribution has enabled the numismatists, working on these coins, to classify them into two clear series. The first series includes those coins which are known to have been found within the limits of a particular area. The coins found in one area are quite different from the coins found in another area in their make, fabric, symbols and weight. These coins, by their confinement within a locality, suggest that they were the issues of that very locality, where they have been found. The other series consists of the coins found throughout the country from north to south and east to west and they are of one weight standard and bear uniformally five symbols. In other words they were universal coins of the country and were current during the period when the country had an imperial administration. And, we know that in the early period, this was the case in the times of the Nandas and the Mauryas.

Another very important fact to be noticed in this connection is that the coins of the first series are not found generally along with the coins of the second series. If per chance, they are known in any hoard, they are only a few and are the most worn of the lot. This further makes it clear that the local coins were earlier than the coins of the imperial series. This no doubt places the coins of the first series in the age of the *Mahājanapadas*, just before the rise of the Magadhan empire.

Thus, even without knowing the meanings of the symbols, we are able to distinguish the coins of various *mahājanapadas*. The coins of each *janapada* have their own distinct symbol or symbol-group, weight-standard and metrology. These coins also probably include the coins known in the earlier literature as *śatamāna viṁśatika, triṁśatika, sāṇa* etc. These coins have one, two or four symbols.

The coins having two symbols, in most cases, have the same symbol repeated and for the purpose of any interpretation they are at par with the coins of one symbol. The coins having four symbols may be distinguished into three series : (i) having a set of two symbols, each symbol punched twice ; (ii) having three different symbols, one of them being stamped twice ; and (iii) having all the four symbols different. The coins of the latter series, may be placed with the coins bearing five symbols for the purpose of any interpretation.[2]

1. Gupta, P.L., *A Bibliography of the Hoards of the Punch-marked Coins.*
2. These observations are based on the studies of P.L. Gupta, which is not yet published.

A passage in the *Visuddhimagga*, a Simhalese work of late date, says that every place, which issued coinage, had its own distinguishing mark or marks stamped on it; by observing which the *heraṇṇika* (shroff) could at once tell from which place a particular coin came. So, it is not difficult to co-relate the symbols on the coins of the first or the local series with their find spots and suggest the locality of their origin. It appears that all or most of the sixteen *mahājanapadas*, and probably a few smaller States also, issued their own coins. In all these cases their mints would have been situated in their capital cities like Rājagṛiha or Pāṭaliputra, Kośala, Kāśī etc.

But it is difficult to know, which of the symbols indicated the mint or locality in the case of the coins that have four or five different symbols. It is easy to think that each of the four or five symbols must be representing the different institutions of the State; and as such various suggestions have been put forward by a number of scholars regarding the symbols of the *Kārshāpaṇa* series i.e. having five symbols. According to them, they represent State, king, mint, religion and mint-master;[1] but no suggestion has been made so far about a particular symbol representing a particular institution, with the solitary exception of the "three-arched hill with crescent", which is identified as the *rājāṅka* of the Mauryas.[2] Thus, it is not easy to suggest if all the imperial coins were issued from one central mint or there were several mints in various provincial head-quarters of the empire. However, the analysis of various hoards of the imperial punch-marked coins seems to indicate that at least in the time of Aśoka, if not earlier, there were more than one mint functioning in the empire. Besides a central mint at Pāṭaliputra, there were at least three other mints; one in Central India, not unlikely at Ujjayinī; the other in the region of Taxila and the third somewhere in Kaliṅga or Andhra.

II

Sometime in the third century B. C., a new technique of manufacturing coins was introduced in this country. It was the technique of casting coins from moulds. Instead of

1. Chakravarty, S. N., *JBBRAS*, XX, p. 84; Allan, *BMC, AI*, intro., LXXII; Kosambi, D. D., *New Indian Antiquary*, IV, p. 167; Durga Prasad, *NS*, XLV, p. 80; Walsh, E.H.C, *Punch marked Coins from Taxila*, p. 5.
2. This is the observation of P. L. Gupta after an examination of more than 25,000 punch-marked coins scattered all over India

punching several symbols by separate dies, a single model was prepared, where all the symbols were put together, and then from that model, moulds were made and molten metal was poured into the moulds to cast the coins.

We have early cast coins having only symbols, in some cases only on one side and in most cases on both the sides. These cast coins are known only in copper and are mostly confined to the period in the pre-Christian era. In the later period, they are rarely known. The only State that issued moulded coins in the later period was that of the Yaudheyas.

Along with the technique of casting coins, another technique of manufacturing coins was employed in this country and it found great popularity. This was the technique of striking coins from dies which was distinctly a developed form of the technique earlier employed in making the punch-marked coins. Here instead of making punches having a single symbol, the entire motif was engraved on a single die and was later stamped on the metal pieces This device saved the labour that was used in stamping a coin four or five times by punches having a single symbol. This technique also had superiority over the cast technique as the dies here took the place of models and despensed off with the necessity of making moulds.

Though the technique of casting coins did not find favour with the State mints, it nonetheless proved a very useful device to the counterfeiters. Many moulds, used in State mints as well as in the ateliers of the counterfeiters have come to light and an exhaustive study of these moulds was made by Birbal Sahni in his work *The Technique of Casting Coins in Ancient India*,[1] wherein he has examined the moulds found at Eran, Rohtak, Taxila, Mathurā, Ataranji Khera, Sanchi, Koṇḍapur, Sunet, Kāshī, Nālandā and Kadakal. Since then, some moulds have also come to light from Śiśupālagarh[2] and Khokhrakot,[3] Mathurā[4] and Koṇḍapur moulds.[5]

These moulds were made either of metal or of clay. While a single mould of metal has come to light from

1. *Memoir* published by the Numismatic Society of India.
2. *Ancient India*, No. 5, p. 99.
3. *JNSI*, XV, pp. 68-69.
4. *JNSI*, XVI, pp. 173 ff.
5. *Punch-marked Coins in the Andhra Pradesh Government Museum*, pp. 132-135.

Eraṇ, clay-moulds are numerous. The bronze die, found at Eraṇ, was a broken mould about half an inch thick, with a depression at the back with the impression of a punch-marked coin. This was evidently a forger's apparatus, meant to counterfeit a punch-marked coin, that was produced earlier by stamping several punches.

The clay moulds show that three distinct techniques of moulding coins were employed in this country. One such is known from Rohtak. The moulds used in this technique belonged to the State mint of the Yaudheyas. Several thousand fragments of these moulds were accidentally discovered by Birbal Sahni.[1] They belonged to the coins of the Yaudheyas, which bear the legend *Yaudheyānāṁ Bahudhānyake*, with a bull on one side and an elephant on the other. They were made up of a series of discs placed in a vertical column. The whole pile of the discs was plastered over with clay, only a funnel-like crater being left at the top for receiving the molten metal. The crater led vertically down into a central canal, like the shaft of a mine. From this canal, again as in a mine, horizontal channels led out at different levels, and these opened into the coin sockets. At each level eight such channels radiated from the central shaft and opened into as many coin sockets arranged in a ring. The coupled faces of the contiguous discs bore the negative impressions of the obverse and reverse respectively, and were so placed as to make the opposite sockets coincide exactly. After the metal had been poured in and the moulds were cool enough, they were broken up and the coins attached to the whorls at the end of the spokes, were broken off. This coining apparatus was more complex in structure than any yet discovered anywhere and indicated a high degree of skill and intelligence. Birbal Sahni, who studied these moulds in their minutest details, is of opinion that they were comaparatively finer and more efficient than the Roman moulds.[2]

The second technique of casting coins is noticed in the moulds found at Mathurā, Śiśupālagarh and Koṇḍapur. The Mathurā coin-moulds are round discs 2.35″ in diameter, of very fine clay, baked red, on which the impressions of the punch-marked coins are clearly preserved. Ten such complete and one half discs were discovered in the digging at the Katra Kesavadāsa, one of the oldest sites of Mathurā. Some of the discs have the coin-sockets on only one side, the other

1. *Technique of Casting Coins in Ancient India*, pp. 7-8.
2. Ibid., p. 58.

side being blank and the others have the coin-sockets on both the sides. This suggests that the complete coin-mould consisted of at least three discs : the middle disc bore coin-sockets on both the sides and outer ones had blanks on their exposed faces. It is quite possible that the moulds had more than one middle disc with coin-sockets on both the faces. There are tenons and mortices on the coupled faces which enabled the operator to replace the discs in position after the models were removed ; on the rims of most of the discs oblique key-lines are noticed. A very thin luting was used to cover the moulds. The luting was composed of relatively coarser clay than the usually fine clay of the discs The metal was poured in the moulds at the side, into a peculiarly shaped opening through the edges of the discs, where they met. From the only complete set of three discs, it is known that the edge of the middle discs was cut away into a V-shaped notch, with a straight channel on each face leading from the notch to a point just beyond the centre. From this main channel four short branch channels came off at right angles, two from either side of it. The ends of these four channels and that of the main channel itself, communicated with the five coin sockets. To complete the opening at the edge of the triple mould, the two outer discs were excavated on their inner sides into shallow depressions, which either fitted opposite each other on either side of the notch in the middle disc, or lay obliquely on the two sides of the middle disc. These channels were made only on one of the two coupled faces ; on the other face coin-sockets have no canals leading to them. These moulds bear impressions of the punch-marked coins.[1]

Two mould discs, like those of the Mathurā moulds, bearing the impressions of the punch marked coins, were found at Śiśupālagarh, near Bhuvaneshvara in 1948. They are of grey colour. One of them is complete and the other is a fragment. Each belongs to an independent mould and shows coin sockets on one face only, while the other is plain. It is not possible to say if the complete mould consisted of only two discs or more like that of Mathurā moulds. But unlike the Mathurā moulds, the complete disc shows eleven coin sockets, placed irregularly. The fragmentary disc has preserved only one complete socket and portions of two circular coins. On the rim of the complete disc are engraved some key-lines, consisting of two or three straight lines and an oblique line, which were presumably continued on the missing couple. The

1. Ibid., pp. 44, 59.

fragmentary disc has an oblique line on its edge. No luting was detected on the edge of either disc. Instead, the fragmentary disc has its edge slightly raised, which was obviously intended to insure a close coupling with its missing counterpart. The complete disc has at its rim a V-shaped notch with a straight channel for the inflow of the molten metal; but it is not connected with the coin-sockets by means of feeders, that might have existed on the missing couple of the disc. The fragmentary disc shows, besides the central channel, feeders inter-connecting the individual sockets.[1]

Fifty-four fragments of coin moulds, intended for casting punch-marked coins, were found in the excavations at Koṇḍapur in 1940. The fragments show that the moulds were discs like those of Mathurā and Śiśupālagarh, made of clay baked light buff; a few of them were grey. It apppears from these fragments that each mould-disc had a number of coin sockets, arranged in two rows Some of the fragments show the straight main channel; but bear no feeders connecting the channel and the sockets. However, one fragment disclosed that the sockets had inter-connecting feeders. The restoration of the disc, made by P. L. Gupta, shows that the mould discs of Koṇḍapur had on one face two rows of coin sockets on the either sides of the straight central channel, much like the complete mould of Śiśupālagarh At the top of the channel, on the outer side, there was probably a V-shaped notch, but on no fragment of this part of the disc does it survive. One of the two coupled discs had no inter connecting feeders, while the other had, just as in the Mathurā moulds. No traces of key-lines and luting are noticeable on the available fragments; presumably they existed on the complete discs. One of the fragments shows a slightly raised margin, which is much like the margin of Śiśupālagarh fragmentary disc. Tenons and mortices like those seen on Mathurā moulds, are not noticed on any fragment. The Koṇḍapur coin-moulds appear to be more akin to Śiśupālagarh moulds in respect of the arrangement of sockets, their feeders and the rim at the edge.[2]

With the slight differences in the forms of the moulds from Mathurā, Śiśupālagarh and Koṇḍapur, the technique of casting coins from them was one and the same. The metal was poured in these moulds at the side. The most important peculiarity of these moulds is that while the Rohtak moulds were meant to cast coins only once, these moulds could

1. *Ancient India*, No. 5, p. 69.

2. *Punch marked Coins in the Andhra Pradesh Government Museum*, pp. 132-133.

be used for repeated castings and were less complex in nature.

Very similar to these mould-discs, are the mould-discs that were found at Taxila and the square mould-slab found at Ataranji Khera. 28 moulds (8 complete discs and the rest in fragments) were found at Sirkap, meant for casting coins of Azes and Maues, the Śaka rulers. These discs are of two sizes, one about four inches and the other about three inches in diameter. All the discs are blank on one face and it is possible to couple some of them into pairs. It appears that the casting was done in pairs of discs, the metal being poured in through a funnel-shaped excavation at the edge. The mode of construction is crude, the clay is not well burnt, the finish is very poor and the discs in pair do not fit well together. There is no tenon and mortise device. Nor are the channels for flow of metal likely to have been very efficient. The funnel-like inlet narrows into a fine canal which feeds the nearest coin-socket, and it is from this socket that all the others have to be fed, by equally narrow connecting channels. None of the moulds show any trace of a luting, but this need not mean that no luting existed at the time of casting.[1]

The Ataranji Khera mould is also a multiple-coin mould; but unlike those described above, it is rectangular in shape. It is outwardly of bright red colour; but the clay in deeper layers is dark grey. In the middle of the four sides is a large expanded opening from which several canals branch out to supply the coin-sockets. These canals, however, only feed the nearest sockets which also communicate with another through short connecting channels. The sockets further removed from the main opening are supplied indirectly through the nearest coin-socket. The margin is slightly raised in order to insure a closer coupling with the counterpart. At each of the two corners, which are preserved, there is a tenon. This mould was meant to mould the copper coins of Huvishka.[2]

The third technique of casting coins is noticed in the moulds found at Sunet, Kāśī, Nālandā, Sanchi and Khokrakot. Unlike the complex multiple moulds, described above, these moulds are single coin-discs. They bear the coin-impression (obverse or reverse as the case may be) only on one face, the other being either flat or slightly convex. The Sunet moulds were meant to cast Yaudheya coins having

1. *Technique of Casting Coins in Ancient India*, pp. 39,59.
2. Ibid., pp. 45, 60.

Kārttikeya and the legend *Yaudheya gaṇasya jaya*.[1] The Kāśī and Nālandā moulds were meant for casting Gupta gold coins. The single mould known from Kāśī is fragmentary and has the impression of the reverse of the coin of Chandragupta II.[2] Nālandā produced three dark grey terracotta moulds belonging to three different sets. One bears the obverse of the coin of Jayagupta and the rest two of Narasiṁhagupta, one representing the obverse and the other reverse, but not belonging to the same set of moulds.[3] The Khokrakot mould has the reverse impression of the Ardoxo type coin of Huvishka.[4] Sanchi mould relates to the coin of Viśvasena of the Western Kshatrapa dynasty.[5]

These uni-coin moulds, found at different places, more or less represent one and the same technique. The Sunet moulds are discs of about 28 mm. and bear the socket of the coin 23 mm. in diameter. Round the coin socket there is a raised rim 2 to 3 mm. wide, which has a rough fractured surface, except for a smooth gutter-shaped channel leading across the rim into the socket. It was along this rim that the disc was coupled with another bearing the opposite design. The two appressed rims enclosed the coin-socket and the two half channels together formed the circular inlet for the metal. The casting was done in a series of discs placed one over the other, so as to make up a cylindrical pile. In between the contiguous pairs, a layer of clay plaster was placed like mortar between bricks. The whole pile was then plastered over on the outside with the same binding material, taking care to leave open all the channels into the sockets. Thus, there would have been a longitudinal row of openings along one side of the cylindrical mould, each leading independently into a coin socket. How this row of canals was supplied with metal, is not clear from what is available. However, Sahni has conjectured some possible method of feeding the coin-mould. Some of the discs also show one or more narrow grooves, marked on their outer edges which in all probability served the purpose of key-lines.[6]

The Kāśī mould being fragmentary does not throw any light on its technique. So is the case with the Khokrakota Kushāṇa mould. It does not show any trace of feeding

1. *Technique of Casting Coins in Ancient India*, p. 34.
2. Ibid., p. 39.
3. Ibid., pp. 37, 62.
4. *JNSI*, XV, p. 68.
5. *Technique of Casting Coins in Ancient India*, p. 48.
6. Ibid., p. 35.

canal. The coin-mould of Jayagupta is a clay cylinder 3 cm. in diameter, 13 to 17 mm. high, with a flat bottom. The coin socket is placed concentrically on the upper end; it communicates with the exterior through a rather wide channel which expands outward like a funnel, with the outer opening nearly twice as wide as the inner. It bears two slightly oblique key-lines on the cylindrical exterior and also the traces of mud lutings. But it is not possible to say if the coins were cast singly or in series like Sunet moulds. One of the moulds of Narasimhagupta, which bears the obverse impression, is a disc 8-9 mm. thick with a sign at the flat bottom. The exterior has four well marked grooves to serve as key-lines. The inlet for the metal is very definitely funnel-shaped. The third Nālandā mould is 6-7 mm. thick, with three key-lines and funnel-shaped inlet channel. The details of the technique of casting by these Nālandā moulds are not available, but essentially it would not have been different from that employed at Sunet.[1]

III

About the technique of striking coins from dies, little is known from ancient sources. Not a single die of ancient coins has come to light so far. But this technique, once employed in about the second century B.C., continued throughout the centuries in the mints of Indian rulers and even today, the coins that are issued are die-struck, the only difference being that they are manufactured through machanical process, while in the olden days, it was manual. An account of the process of manufacturing coins at the Bombay mint towards the end of the eighteenth century is available to us. According to that, the metal was brought to the mint in bars of the size of the little finger, where a number of persons, seated on the ground, provided with scales and weights, a hammer, and an instrument between a chisel and a punch: before each man's berth was fixed a stone by way of anvil. The bars were cut into pieces, by guess, and if on weighing, any deficiency was found, a little particle was punched into the intended coin; if too heavy, a piece was cut off, and so on, until the exact quantity remained. These pieces were then taken to another person, whose entire apparatus consisted of only a hammer and a stone anvil, and he battered them into something of a round shape, about seven-eighth of an inch diameter and one-eighth thick. Then they were ready for impression. The die was com-

1. Ibid., p. 39.

posed of two pieces : one inserted firmly into the ground, and the other, about eight inches long, was held in the right hand of the operator, who squatting on his heels, filled his left hand with the intended coins, which he with inconceivable quickness slipped upon the fixed die with his thumb and middle finger and with his fore-finger dexterously removed them when his assistant, a second man with a mall, gave it the impression, which he did as rapidly as he could raise and strike with the mall on the die held in the right hand of the coiner.[1] The technique in the earlier period would not have been in any way much different from this.

The coin-moulds and the coin-dies, apart from throwing light upon the technique employed, reveal the birth place of the coin, for they never pass into circulation. While the coin is peripatetic, the moulds and dies are static. They have therefore a historical value of their own. The localities, from which the coin-moulds, described above, have been found may easily be regarded as the old mint-sites. At the same time it should not be ignored that the coin-moulds that have been found at most of these places were meant for manufacturing such coins, whose actual specimens are not known to have ever been manufactured by casting process. While the punch-marked coins were made by stamping several punches on the metal flan, the Śaka, the Kushāṇa and the Gupta coins were produced by die-struck method. It is only the coins of the Yaudheyas of both the types, known in the moulds of Rohtak and Sunet that were always moulded. Again, it is only at these two sites that the moulds have been found in considerable number. At other places their finds are sporadic. It is, therefore, not unlikely that the moulds found at Eraṇ, Mathurā, Śiśupālagaṛh, Koṇḍapur, Kāśī, Nālandā and Khokrakot might be the apparatus of the forgers. While there could be no doubt in this nature of the moulds found at Kāśī, Nālandā and Khokrakot, there is also the probability of other genuine moulds meant for issuing punch-marked coins. In their case, it may be pointed out that no silver coins are known outside the Punjab (where Indo-Greek and Indo-Śaka coins were current) and Western India (where the Western Kshatrapas issued their silver coins) till the rise of the Guptas. During all this period the old punch-marked coins were in circulation. Hence, it is not unlikely that during this period people conceived the idea or felt the need of making the punch-marked coins through this easy technique of casting.

1. Moor, *Narrative of Little's Detachment*, App. Note II, pp. 499-500.

During the second-first centuries B. C. and in the first centuries A. D. there was a large number of tribal States in western and central India, who had issued their own coins, which most conveniently reveal their origin. Coins issued from Eraṇ, Ujjain, Kauśāmbī, Māhishmatī, Uddhehika, Sudavapa, bear the place names, which were undoubtedly the locality whence they were issued. Similarly, the coins of the Śibi and the Āgreya republics show that they belonged to Mādhyamikā and Agrodaka respectively. The local monarchical States of Mathurā, Ahichchhatrā, Kośala and Vatsa had also issued their own coins. They are found in large numbers in those localities and indicate that they all had their own local mints.

But it is not easy to determine the mint towns of the Punjab and the north-west, where ruled the Indo-Greeks and the Indo-Śakas. They bear no indications of the place of their origin. These coins however, have some monograms in Greek and letters in Kharoshṭhī. J. Prinsep suggested that these monograms and letters stand for mints;[1] but he never developed it. Charles Masson[2] and H. H. Wilson[3] shared Prinsep's view, but contributed nothing to its advancement. It was Cunningham who gave some serious attention to these monograms and letters and published an article, wherein he attempted to explain some of the monograms. He illustrated 150 monograms of which twelve were Kharoshṭhī letters and the rest Greek. He ventured to read a number of these as the names of cities, taken from Ptolemy's map of India and from other classical sources.[4] But Cunningham's view was vehemently criticised by A. Chabouillet[5] and A. Von Sallet.[6] Percy Gardner, too, was hesitant in accepting his suggestion. In his *British Museum Catalogue*, he wrote: "Gen. Cunningham has well remarked, in regard to some of the Greek monograms, that their constant recurrence during successive reigns proves that they cannot denote monetary magistrates, but must stand for mints. There is reason in this; but when the writer goes further, and tries to identify the various mints which they respectively represent, we, like most students of these coins both in England and abroad, are unable to follow him. While therefore we must acknowledge the possibility that

1. *Prinsep's Essays*, I, pp. 55-57.
2. *JASB*, 1836, p. 545.
3. *Ariana Antiqua*, p. 223.
4. *Num. Chro.*, VIII (1846), p. 175-196.
5. *Rev. Num.*, 1867, p. 392.
6. *Zeit. f. Num.*, 1879, p. 199.

many of the Greek monograms may stand for the names of the mints, we must stop short at that point. Nor does there seem to be any probability that we shall advance further, until the find spots of Bactrian and Indian coins are far more exactly recorded than they have hitherto been. The monograms and letters of the Pāli alphabet do not recur in the same way as the Greek, but vary far more; and it does not seem probable that they stand for mints."[1]

In chapter II of his *Coins of the Indo-Scythians*[2] Cunningham answered his critics by adducing many more examples of the well known coins from the Greek, Cistophoric and Parthian series which bear mint names expressed by monograms or inscribed in abridged form as well as at full length, whose interpretation has been generally accepted. But, no body seems serious about identifying the monograms and the letters as the mint-marks or the names of the mints.

The Indo-Greek coins, on the basis of typology and the find-spots, have been attributed to various regions; but their origin to any particular mint or mints is not suggested. The only place, where the Indo-Greek coins might have been minted is believed to be Sāgala or Sākala, which according to the *Milindapañha* was the capital of Menander. This belief rests only on its being the capital town. Sāgala has been identified with Sialkot in the Rechna Doab by some scholars[3] and with Sānglawāla Tiba by others[4]. But Sialkot is neither a notable archaeological site nor a great source of ancient coins. Whitehead says that the Rechna Doāb furnishes no such prominent site as could be identified with Menander's capital and principal mint. He has suggested Kāpiśi[5] as the alternative and it has found favour with Allan.[6] Geographical and archaeological considerations suggest, as has been rightly pointed out by A. K. Narain, that Sāgala in the Madra country, on no account, can be referred to as the city of the Yonakas. On the other hand, archaeological evidences favour Udyāna as the right place which could be identical with Sāgala, the capital town and the principal mint of Menander. This is further supported by the discovery of the two Bajaur hoards and the Yaghistan find

1. *BMC, GS*, intro., p. lv.
2. *Num. Chro.*, 1888, pp. 204-246.
3. Fleet quoted in Narain, A. K., *Indo-Greeks*, App. III, p. 172.
4. S.N. Majumdar, *Cunningham's Ancient Geography of India*, pp. 205ff.
5. *Num. Chro.*, 1950, p. 212.
6. Marshall's *Taxila*, p. 863.

in the Swāt region consisting mainly of the coins of Menander in almost mint-condition, and the only inscription referring to Menander, the Swāt relic vase of Meridarch Theodorus and the Bajaur seal of Theodamus.[1] Recently, Edmund Zygman has suggested that Sāgala was also an Indo-Śaka mint. He has read *Sāṅjala* in a Kharoshṭhī monogram found on a tetradrachm of Azes II in the collection of the American Numismatic Society.[2]

Kapiśā and Pushkalāvatī were the other two mint towns in the days of the Indo-Greeks which is borne out by the coins bearing the legends *Kavishaye nagara devadā* and *Pukhalāvadī devadā ambi*. A continuous series of the coinage of the Hermaios type also show that the Kapiśā area was in the possession of the Greeks of Hermaios' line. According to Marshall, Kapiśā was also the mint town of the Indo-Śakas. He believed that certain Zeus types of Azilises, notably the Zeus Nikephoros enthroned belonged to Kapiśā.[3] But there is hardly any justification for this belief.

Jenkins on the basis of certain numismatic evidences, suggests that Pushkalāvatī was also a Śaka mint. According to him, Pallas-type coins of the Śakas were minted there.[4]

Arachosia was prabably another mint town of the Indo-Śakas.[5] According to Marshall, the Maues types of coins may be attributed to this mint.[5] But Jenkins does not accept this; however he recognises the existence of an Indo-Śaka mint in Arachosia, which issued the coins of Vonones group and of Azes and Azilises.[6]

IV

Now coming to the times of the Kushāṇas and the Guptas, who ruled over considerable part of the country, we have a large number of coins of both these dynasties, issued in a large number of varieties; but on none of them any indication regarding the place or places of their issue could yet be noticed. While the Kushāṇa coins do not at all help us in the matter, there is some such probability in respect of the Gupta coins. Some indications regarding the mints may be found on them if the symbols on the reverse of the gold coins could be properly analysed. The largest number of

1. *Indo-Greeks*, pp. 172 73.
2. *ANS. Museum Notes*, VII, 51-56.
3. Allan in Marshall's *Taxila*, 863; Jenkins, *op. cit.* 22.
4. *JNSI*, XVII, ii, p 22.
5. *Taxila*, pp 862 ff.
6. *JNSI*, XVII, ii, 2ff.

the symbols are known on the coins of only those emperors who wielded authority over a wider territory, while such symbols are confined only to one or two in respect of those who had a shrunken territory for an empire.

As regards the mints of the post-Gupta period in the north and the entire south, it is hardly possible to say anything. Unfortunately these branches of Indian numismatics have not yet found the adequate attention of the numismatists. Whatever is known about these coins, in most cases it is based on guess or assumptions. Broadly, they may be attributed to some dynasties or territories and in some cases to kings as well; yet details lack about their place of origin.

Though the issue of the coinage was one of the prerogatives of the rulers, yet the ancient rulers of India, never considered it imperative to use it zealously. We know of many dynasties, big and small, which never issued any coins at all. The State issued coins as a matter of convenience. If there was sufficient currency, they considered it unnecessary to issue fresh coins. So, it is quite likely that there were not many regular mints in ancient India. At the same time, the mints, noted above, may not all have been regular mints. Similarly, there might have been some other mints, about which we do not know anything. It is difficult to say if we shall ever know about them. We have seen, coins by themselves do not reveal much about their exact place of origin; and mint-apparatus, official as well as of forgers, rarely come to light.

V

However, this is not the case when we come to the mediæval period of the Indian history. The Muslim rulers had given exaggerated importance to their prerogative of sovereignty, known as *khuṭbā* and *sikkā*. The proclamation of the regnant appellation and title of the actual occupant of the throne or of a presumptive claimant to the *masnad* in the Friday prayers and the stamping of money inscribed with his *Alqāb* were universally regarded as manifestoes of unchallenged supremacy or incontrovertible proofs of rebellion or treason. So, coins were struck by the Muslim rulers not only from their capital towns, but also in almost every town or province or country in their name to mark the occasion of its conquest or acquisition by their arms. It is therefore, not wrong to suggest that many of such issues of the coins are the records of the momentary triumph after a casual incursion or temporary raid. They sometimes imply merely the formal

acknowledgement of allegiance on the part of the hereditary chief of the place and occasionally they mean nothing but a nominal concession of supremacy on his part to ward off an invasion or terminate the period of distress.

As a result of this, the Muslim coins invariably bear the names of the place from where they were issued.

The Muslim rulers were not content with issuing coins from their head-quarters and the conquered territories; they also possessed mobile mints, which moved along with their armies, or with the camp of the kings and issued coins if and when the occasions arose.

Thus, we have a long list of mints, from the coins as well as from the literary sources, which functioned during the Muslim period. They may be distinguished by their nature as belonging to four categories (i) regular official mints, at the central towns of the kingdom or province; (ii) temporary mints issuing *sikkā* on the occassion of an occupation or conquest; (iii) mobile mints of the army; and (iv) the royal camp mints. It appears that the mints of the second category were not a different unit from the mobile mints of third and fourth categories. But unfortunately, no attempt has yet been made to distinguish them properly. Many place names, bearing the epithets like *Iqlīm* (country) or *khittā* (territory) on coins undoubtedly show that the coins were not issued from any particular place but were issued by mobile mints within that territory. The Mughal coins issued from camp mints had the mint name *Urdu* (i.e. camp). There are, however, many Mughal coins, which may be identified as camp mint, though they do not bear any such epithet. The Durranis used the word *Rikab* on the issues of their mobile mints.

The royal Mughal camp mint was known as *Mu'askar-i-Iqbal* (camping ground of the good fortune). In the time of Akbar, coins issued from a large number of places bear the name of their origin with the title *Dārul-Khilāfat* (i. e. abode of the Khalifa), meaning the capital. Obviously all these coins were issued from the royal camp-mint of Akbar, which temporarily formed the capital-seat of the government so long as the king was there. Later on, Akbar suspended the use of the name of the mint place for some time from the year 987 or 988 A.H. and instead used an anonymous epithet, *Urdu-zafar-qarin* (camp associated with victory).[1]

The earliest Muslim mint in India was Lahore, which was named Mahmudpur by Mahmud Ghazni, who issued

1. *Essays Presented to Sir J. N. Sirkar*, pp. 154ff.

his coins bearing the name of this mint place. The Turk Sultans of Delhi issued their coins from their capital at Delhi. Of Balban we have a few coins, bearing the name Nagor, which had for some time been read as *Ba-Gaur* and was considered to mean Gaur (Bengal). The coins bearing this name are extremely few and may well be an issue of *Khutbā* and *Sikkā* type or may be issues of an expedition mint. Likewise, Lakhnauti is found on the coins of Razia. Balban issued coins from Alwar, Sultanpur and Lakhnauti, On his coins all these places bear the epithet, *Khitta*, which suggest that they were camp mints. Khiljis had only three mints—Delhi, Deogir and Darul-Islam. Darul-Islam was the name given to Ranthambhor by Alauddin Khilji. Of the Tughlaqs we have the coins which bear the names, besides the above three, Mulk-i-Tilang, Mulk-i-Mab'ar, Qutbabad , Tughlaqpur *urf* Tirhut Iqlim, Iqlim Lakhnauti, Sultanpur, Daulatabad, Satgaon, Dhar, Sāhat-i-Sind (plains of Sindh), Iqlim-Shark (Eastern country) and Sahr-i-Patna. Some of these mints betray their very nature of being expedition mints. Syeds and Lodis confined themselves to Delhi. Only some coins of Sahr Jaunpur are known, where they had made an expedition.

From the time of the Suris, the number of mints swell like any thing. Their coins bear the names Shergarh, Ujjain, Agra, Panduah, Chunar, Ranthambhor, Satgaon, Sarifabad, Shergarh Bhakkar, Shergarh Delhi, Fathabad, Kalpi, Gwalior, Malkot, Bhanpur, Hazarat Rasulpur *urf* Patna, Darul-zarb qila Tanda, Qila Raisen, Awadh, Bādaun, Jhusi and Banaras.[1]

The list of the Mughal mints is much more exhaustive. They have been compiled by C. R. Singhal[2] and we need not enumerate them here. It would be enough to say that Akbar had 84, Jahangir 32, Shahjahan 43, Aurangzeb 87, Shah Alam I 53, Jahandar Shah 37, Farrukhsiyar 66, Muhammad Shah 71, Ahmad Shah 50, Alamgir II 59 and Shah Alam II 102 mints. Many more names have come to light since the publication of this list.

In the time of Farrukhsiyar, the system of farming was introduced for the mints; i.e. the right of minting coins was given to persons who guaranteed certain fixed annual

1. Wright, *The Sultans of Delhi. Their Coinage and Metrology*. List culled from the catalogue of the coins of the respective dynasties.

2. *Mint Towns of the Mughal Emperors of India.*

revenue to the royal exchequer. This swelled the number of the mints in his and his successors' time with the result that when the Mughal empire became weak and Shah Alam II was a nominal figure, every one, who asserted his independence, issued coins from his own place.

The Gujarat and Bengal Sultans were other Muslim rulers who had issued their coins from more than one mint. The coins of the Gujarat Sultans are known from the mints at Ahmadabad (Shahr-i-muazzam—the great city); Ahmadnagar (Shahr-i-Humayun -the auspicious city), Mustafabad (Shahr-i-azam–the great city), Muhammadabad *urf* Champaran (Shahr-i-mukarram-the illustrious city); Khitta dib, Burhanpur and Daulatabad.[1] It appears that from the Gujarat Sultans, the later Mughals took fancy for giving epithets to their mint places. Hodivala has collected a list of all such honorifics that the Mughal rulers used for their mint-cities.[2] They disclose their nature as well as the emperor's mind behind them. The Bengal Sultans had their coins issued from Lakhnauti, Sunargaon, Ghiyathpur, Satgaon, Firozabad, Sahr-i-nao, Muazzamabad, Jaunatabad, Fathabad, Chatgaon, Rohtaspur, Mahmudabad, Barbakabad, Muzaffarabad, Muhammadabad, Husainabad, Chandrabad, Nasaratabad, Khalifatabad.[3]

VI

The European traders, that came to India, established their own factories and managed to issue their own coins. The Danes issued their coins from Tranquebar; the Dutch from Palicate, Negapatam, Masulipattam, Pondicherry, Cochin and Tuticorin[4] and the French from Pondicherry, Karikal, Yanaon, Masulipattam, Mahe, Chandarnagar and Surat.[5] The Indo-Portuguese established their colony at Goa and thence they issued their coins. Coins issued for Diu, Bassein, Chawl and other colonies are also known.[6]

The English first established their mint at Madras, then at Bombay and lastly at Calcutta. Besides these mints,

1. Singhal, *Catalogue of the Coins of the Gujarat Sultans in the P. W. Museum*, intro. pp. XXVIII-XXX.
2. *NS*, XXXV, p. 31.
3. Karim, A., *Corpus of the Muslim Coins of Bengal*, p. 157.
4. Scholten, C., *The Coins of the Dutch Overseas Territories*, pp. 134 ff.
5. Zay, E., *Histoire Monetaire des Colonies Francaises*, pp. 269 ff.
6. *Sale Catalogie of the Grogan's Collection.*

the East India Company issued coins from a number of local mints, when it occupied the territory where the mint was located. But these mints were soon after closed. From the Madras mint the English issued coins in the name of Arcot. Sometimes, coins bearing the name of Arcot were also issued from the Calcutta Mint. The Calcutta Mint, except for a few years in the beginning, never issued coins in its own name. Its coins mainly bore the name of Murshidabad. Coins in the name of Farrukhabad were first minted at the site but later they were issued in the name of that mint from elsewhere. All these coins were in the name of the Mughal emperors. The Bombay mint in the beginning issued coins of the English pattern but soon returned to Mughal pattern and continued it in its own name. But in the later days, towards the end of the eighteenth and the beginning of the nineteenth century, it issued coins in the name of Surat.[1]

By 1834, the mint activities of the East India Company became confined to Calcutta, Bombay and Madras. But the Madras mint was soon closed; only the remaining two mints continued issuing coins for India during the administration of the East India Company and thereafter under the British regime. They are still working in the same continuation. The coins of these mints bore no apparent distinction though there had been some slight distinctions. On some of the coins of the nineteenth century the letters B for Bombay and C for Calcutta are found inscribed on the reverse. But most of the Calcutta issues have no mint mark, whereas the Bombay issues have a dot on the reverse, which still continues. The distinctive mark of the Madras mint is not known, but it is believed that the few coins, bearing two dots on the reverse were possibly the issues of that mint.

About the mints of the native States, there is hardly anything to say.[2] After the decline of the Mughal power, the small powers that cropped up had their own mints issuing coins, but not in their own names. They placed the name of the Mughal emperors and were content with putting some marks as distinction. As for the mint, most of them gave the real place of minting; but some of them used the name of

1. Thurston, *History of the Coinage of the Territories of the East India Company in the Indian Peninsula*; *JASB*, LXII, p 52; Upendra Thakur, "Currency of Tirhut during the Early Years of the Company's Rule", *JNSI*, XX, pp. 205-15.

2. Allan, J., *IMC*, IV, pp. 154-55.

Shahjahanabad, the capital of the Mughals. When the Queen of England took over the adminstration of India from the hands of the East India Company, these native States owed their allegiance to the Queen and issued coins in her name, in the same old fashion. Near about one hundred native States throughout India claimed the right of striking their own coins after their adhesion to Britain. But this right was conceded by the British to only those who could vindicate their claim and thus thirty-four States retained the privilege of minting. Some time after, most of these States surrendered their right of coinage to the British administration. At the end there remained only Haiderabad, Jaipur, Tonk, Orchha and Travancore, which retained the privilege of minting coins in silver and copper ; Kutch, Jaisalmer and Kishangarh in silver only, while Gwalior, Ratlam and Baroda struck only copper coins. But in most cases, the coins of these States were not minted at their own places; on the other hand British mints used to strike coins for them. Only Haiderabad and Kutch had their own full-fledged mints. After the integration of these States with the Indian Union, all these issues were suspended.

Now the Indian Union Government has three mints, of Calcutta, Bombay and Haiderabad.

AN HISTORICAL ACCOUNT OF THE BANARAS MINT IN THE LATER MUGHAL PERIOD, 1732-1776

QEYAMUDDIN AHMAD

The right of issuing coins was one of the most important and cherished prerogatives of the kings in the medieval period. Next to the reciting of the *Khutba*, this, perhaps, was the most obvious symbol of the establishment and continuance of a King's rule. It was a closely guarded prerogative which could not be shared with any one, howsoever high, in the realm. Instances of conferment of extraordinarily high ranks (Shahjahan conferred a rank of 60,000 *Zāt* and 40,000 *Sowars* on Dara, which was the highest rank ever granted to a Prince) or even the grant of the rare title of Shah (Jahangir to Khurram) are known but no one was ever allowed to share this privilege.

It is, however, surprising that in spite of the great importance of the subject there are very few references to it in the contemporary Persian chronicles. These chronicles, generally, characterised by a dearth of information on non-political subjects, are even more reticent on the subject of Currency and Mint. It is therefore all the more important that whatever incidental information on the working of the Mints in the Mughal period may, fortunately, come down to us should be thoroughly studied and utilized for the reconstruction of the scope and function and the administrative set-up of this important Department.

The present Account, prepared by G. H. Barlow, in August 1787, is one such document. It gives an year-to-year account of the working of one particular Mint during the later Mughal period. The Account is available among the Mint Series of Records[1] preserved, until recently, in the office of the Mint Master, Calcutta. These records constitute a series which, although of great historical importance, has not yet been thoroughly examined and studied.

These records were examined only once before, in 1893, by Edgar Thurston who contributed a paper entitled 'Note on the History of the East India Company's Coinage, 1753-1853,'[2] based on a general examination of this series. His is, however,

1. *Mint Committee Proceedings*, No. 8, dated 26th June, 1792.
2. *JASB*, LXII, 1893, pp. 52-84.

a very general account summarising some of the important facts culled out from these records. These have been described without reference to the actual Register out of the large number of records comprising the series.

Thurston has in particular quoted extensively from Barlow's Account, the subject of the present paper. But much of the usefulness and the historical importance of the publication of this Account has been nullified by the fact that Thurston omitted altogether the Appendices which form an integral part of the Account. In fact the bulk of the new and important information furnished by Barlow is contained in these Appendices. What is even more unfortunate is that Thurston, while quoting the Account, does not even indicate that barring the one Table[1] which he has reproduced there were any other enclosures. The reader is thus left altogether ignorant of even the existence of substantially important portion of Barlow's Account.

Another substantial drawback is that the Account has been reproduced out of its proper context. Its genesis as well its introductory and explanatory portions have been omitted. Barlow, for instance, explained in his Account certain technical terms like *chowlie* etc, which appear frequently in the text of the account. He has also explained the units of weights and the process of assaying. Without an understanding of these technicalities much of the Account would remain unintelligible. The account of the Mint during the period of 3rd to 7th regnal year of Shah Alams II's reign has been omitted. Important facts have also been omitted from it (e. g., other departments like Escheats and Customs as well as privileges like monopoly of the sale of lead were incorporated from time to time in the Mint Department).

In the present instance this Account is being presented in its entirety which makes the narrative more comprehensible and also renders it more informative and useful.

The origin of the preparation of this Account is deeply connected with a famous phase in the political history of the Banaras Raj—the period of the Residency of Jonathan Duncan.

When Duncan took charge of the Residency at Banaras, the state of all branches of administration there was deplorable. Duncan's all comprehending measures of reforms

1. This, too, has been presented in an incomplete and mutilated form—Vide Appendix V.

did not miss the Mint Department. On the contrary, he considered it an important Department which was in urgent need of reforms. He wanted it to be reformed and brought "on an equal footing as to Duties with that of the Presidency Mint at Calcutta."[1] His proposals, to this effect, to the Governor-General in Council were referred to the Mint Committee, Fort William, for consideration and report. The latter wanted, first, a detailed report on the history and working of the Banaras Mint. That was how Barlow came to prepare his Account.

This Account is, in effect, divided into two parts dealing with two different subjects. The first contains the history of the Banaras Mint. The second and the larger part relates to the Banaras Mint issue of Gold Mohars, Silver and Copper coins from the year 1776 onwards, their weights and assay, the total number of the different species coined and certain draft Regulations for the much needed reforms in the Currency with a view to stopping the annual fluctuations in the value of the coins. The present paper is based on the first part of the Account only.

Barlow prefaced his Account with certain explanatory remarks which, besides being helpful in understanding the narrative, also contain, some useful information.

Assay: Pure silver in Banaras Mint was said to be 5 *chowlies* (grains) fine. Barlow has explained this as follows: If silver weighing one rupee was put into a crucible with a piece of lead of the same weight, after remaining sometimes in the furnace the lead would "fly off" and the silver, upon being weighed, would be found to be 5 *chowlies* deficient in its original weight. These 5 *chowlies* were not, however, actually lost but were recoverable from the crucible so that pure silver lost nothing in its weight by this process. If, therefore, piece of bullion weighing 1 rupee on being "tried" lost only 5 *chowlies* it was said to be pure silver or to burn 5 *chowlies*, but if it diminished more, say 18 *chowlies*, the excess (13 *chowlies*) was taken to have been alloy and to have gone off with the lead.

When Chait Singh was given the charge of the Mint by the East India Company in 1776,[2] he arranged that all rupees coined in Banaras Mint shall weigh 9M. 6R. 6C.[3] and shall never exceed 18 *chowlies* Assay, "i.e. in one Rupee

1. *Mint Committee Progs.*, No. 4, dated 26 June, 1792.
2. Vide *infra*.
3. M=Masha; R=Ratti; C=Chowlie.

weighing 630 *chowlies* there should be 617 chowlies pure silver and 13 *chowlies* of alloy."

Units of Weights :

8 *Chowlies* or grains = 1 Ratti
64 „ „ „ = 8 „ or 1 Masha
768 „ „ „ = 96 „ or 12 Mashas or 1 Tola

One standard Banaras Sicca (Rupee) weighed 630 *chowlies* or grains = 9M. 6R. 6C.

After explaining these technicalities, Barlow submitted the historical narrative which is as follows :

Muhammad Shah :

A Mint was first established at Banaras in the 15th year of the reign of Muhammad Shah (1734) corresponding to A.H. 1145. [The equivalent year in A. D. as given by Barlow, is wrong. It should be 1732.] The Assay of the Rupee was fixed at 22 *chowlies* but by connivance of the Superintendent of the Mint it was debased to 32 chowlies at different periods between the 30th regnal year and the last one. A table of Duties levied by the Government on different species of coins minted at Banaras is enclosed.[1]

Ahmad Shah :

During the first year of his reign the Mint was under the charge of Raja Balwant Singh who increased the Duties on the coinage by, first, attaching the fee[2] of the officers of the Mint and, then, by establishing new ones to the same amount.[3] In the first year, corresponding to A.H. 1161 (1748) the Assay was kept to 22 chowlies. However, during the 2nd and 3rd years the Mint was farmed to Nand Ram, who in order to increase his profit debased the Assay to 24 and 32 chowlies, respectively.

The farm of the Jawahur Khana or the right of levying a duty @ Rs. 3, As. 2 per cent on old precious stones in the city of Banaras was also brought under the charge of the Superintendent of Mint during this period.

From the beginning of the 4th to the end of the 6th regnal years the Mint was under the charge of Agha Asad Beg, the *Qil'adār* of Chunar. During his farm the Assay of the Rupee varied from 26 to 36 chowlies.

1. Vide Appendix 1.
2. As enumerated in Appendix 1.
3. Vide Appendix 2.

Alamgir II:

At the commencement of his reign the Mint fell into the hands of Nawab Shujauddaula. During the first two years the Assay varied from 26 to 28 chowlies.

In the second year the Sourl (?) Mahāl or the "exclusive privilege of selling lead" as well as the *Bait-ul-Maāl* or the Department of Escheats were also incorporated with the mint.

In the 3rd year Shujauddaula made over the control of the Mint, in jagir, to his brother-in-law, Mirza Ali Khan who farmed it to Subhan Chand. The Assay of the Rupee varied from 24 to 32 chowlies. In the 4th year Mirza Ali Khan farmed the Mint to Murlidhar. This man, though the ostensible farmer, was, in fact, the nominee of a "late eminent Banker" of Banaras.

During his farm the Rupee was debased to 64 chowlies and for the first time reduced in weight by half a ratti. Raja Balwant Singh refused to take them in his Treasury for he had to pay his own tribute to Shujauddaula in the Rupees of customary weight and fineness. On a complaint being made by Balwant Singh the Banker was seized and sent under infringement to Lucknow. He, however, eluded the vigilance of his guards, "with [the help of] profits arising from this fraud on the public," [by debasing of coins].

In the 5th year the Mint was farmed to Nawazuddin Khan who restored the proper weight of the Rupee—5M. 6R. 6C. The Assay continued to be debased and varied between 40 to 48.

In the 6th and last regnal year Mirza Ali Khan (who still held the mint in Jagir) farmed it to Deeda Mal. This man "betrayed the trust, given to him, to a greater extent than the previous farmer," Murlidhar, and debased the Rupee to 100 *chowlies*, "i.e, $\frac{53}{64}\frac{5}{0}$ parts Silver and $\frac{9}{64}\frac{5}{0}$ parts Alloy." The rupee was also reduced by $\frac{1}{2}$ a ratti in weight. Once again, the unscrupulous farmer of the mint was arrested by the Nawab and a fine was extracted from him, 'equivalent to the amount of the ill-gotten wealth."

Shah Alam II:

Shujauddaula, on finding that the farmers of the Mint continued to debase the coins inspite of their agreement to maintain the standard weight and fineness, appointed a person on his own behalf (Amāni) to supervise the coinage. Salah-uddin, a man of credit, was chosen for this onerous duty.

He restored the Rupee to its former weight of 9M. 7R. 0C. and to 26 *chowlies* Assay.

In the 2nd regnal year Shujauddaula gave the Mint in jagir to his Minister Raja Beni Bahadur. Nawab Nurul Hasan Khan, the Naib of Shujauddaula "residing at Banaras to enforce the payment of Balwant Singh's tribute" farmed[1] the Mint to Gopal Das who, as usual, debased the Rupee to 40 *chowlies*.

In the 3rd year Tami Mal (sic) and Amir Chand obtained the farm and continued the Assay at 40 *chowlies*.

In the 4th year Gopal Das once again procured the farm, through the influence of Nurul Hasan Khan, the Assay remaining at 40 *chowlies*.

In the 5th year Balgovind obtained the farm and continued the Assay of the two previous years. The then Assay Master of the Banaras Mint who held the farm jointly with Balgovind had given Barlow an account of the Receipts and Disbursements of the Banaras Mint for the year 1763. Barlow enclosed[3] an English translation of this account for the information of the Mint Committee at Fort William considering it to be a record of importance "which will throw considerable light on the mode of conducting (Mint) business in those times."

In the 7th year Shujauddaula resumed the jagir of the Mint from Beni Bahadur and farmed it to Mirza Hussain, who kept the Assay of the Rupee unchanged.

In the 8th year (1766) Shujauddaula decided on the recommendation of Clive to reform the coinage of his dominion. The Mint was "committed to the care of Mirza Hussain (above mentioned) who engaged to restore the Rupee to its former standard and weight."

A rupee of the 18th regnal year of Muhammad Shah was selected as the model for the reformed Banaras coinage. This model rupee was 22 *chowlies* Assay but due to wear and tear

1. He belonged to the famous Syed family of Bilgram in U. P. Several collections of his letters and other works, are extant.
2. The meaning here is not quite clear for if Beni Bahadur held the Mint in jagir how could Nurul Hasan farm it. Probably, he farmed it with the permission and on behalf of Beni Bahadur.
3. Appendix 3.

it had lost 2 *chowlies* in weight. The reformed rupees were consequently 2 *chowlies* deficient in weight and from that period the Banaras rupees continued at 9M. 6R. 6C., being 2 *chowlies* less than the originally established weight of 9M. 7R. 0C.

In the 9th year (1767) the Mint was farmed to Mons. Gentille, the French Agent in the court of Shujauddaula.

In the 10th year (1769) Doolum Das (sic) got the farm and maintained the Assay at 22 *chowlies*.

Doolum Das continued to hold the farm upto the 14th year (1772) but lowered the Assay of the rupee to 28 *chowlies*.

In the 15th year (1773) Shaikh Zahir held the Mint on the part of the Vazir (Amāni). In the following year Doolum Das again obtained the farm.

In the 17th year (1776) the English East India Company handed over the charge of the Mint to Chait Singh. (Banaras Raj was ceded to the English by the Nawab-Vazir, Shujauddaula, by virtue of Lucknow Treaty of 21 May, 1775.) However, after an year (15 April, 1776) the English restored the administrative powers, including the charge of the Mint to Chait Singh on payment of an annual indemnity of over 22 lakhs). Chait Singh agreed to coin rupees of 9M. 6R. 6C. weight and 18 *chowlies* Assay and to continue the die of the 17th San. This, it was hoped, would put an end to the prevailing confusion in the currency, caused by the annual alteration in the value of the coins. The rupees coined in the Banaras Mint since the 17th year (1776) were expected to be of the same weight and standard and passed current as Siccas.

On the expulsion of Chait Singh in the 23rd year (1781) the Mint remained under the charge of Raja Mahip Narain for about a month and a half. After this, it came under the control of the famous Resident at Banaras, Jonathan Duncan and continued to be under his superintendence till the time of the completion of the Report by Barlow (1787).

Barlow was also required to report on the number of the coins of the different species in circulation in the area. This part of Barlo's account is also highly valuable as it furnishes certain information of numismatic importance.

Barlow stated that *prior to the succession of Farrukhsiyar all rupees coined during a king's reign were considered Sicca and passed at their current value during that reign. On the accession of a new king the coins of the previous king were subjected to a Batta (discount) and were not received in the Royal Treasury.* But the system of farming the Mint, *first adopted by Ratan Chand, Diwan of Farrukhsiyar,* at length introduced the custom of changing the value of rupee every year. Those who had payments to make had to carry *their old rupees to the Mint to have them recoined into Siccas, the appellation given to rupee of the current year.* Barlow went on to add that with the introduction of farming system the farmers of Mint made use of every expedient to draw the old coins into the Mint in order to debase them or to increase the amount of Duty (payable on their recoining). With this end in view and also in order to force all holders of the coins of previous reigns (with their better bullion value) to have them recoined (by bringing them into the Mint) the exploration of all Rupees except Siccas was prohibited, on pain of confiscation, during the period 1754-1776. That this order was strictly enforced, Barlow pointed out, was evident from the case of Balgovind (Appendix 3).

Barlow opined that when the farmers in the 4th 6th regnal years of Alamgir II debased the coin by 13% it was to be supposed that they melted down as many of the best Sanaut Rupees as they could procure. The low state of coinage during the 2nd to 7th regnal years was also to be attributed to this cause.

In addition to these, it was said (Barlow had it on the "authority of one of the oldest officers of the Banaras Mint.") *that when Prince 'Ali Gauhar invaded Bihar a considerable quantity of Banaras Mint Rupees were melted down and minted into Rikabi Rupees.'* These rupees were so called because they were minted in the *Rikab* (Stirrup) Mint accompanying the Prince in his march. These Rupees were 1 ratti, 2 *chowlies* deficient in weight and of 64 *chowlies* Assay. But these were made to pass as Sicca of standard weight and fineness.

Mukhtaruddaula, one of the Ministers of the Nawab-Vazir, permitted Doolum Singh, the farmer of the Mint in the 15th regnal year of Shah Alam II, to coin (recoin ?) several lakhs of the debased rupees issued by Deeda Mal in the 16th year of Alamgir II. Doolum Das however "exceeded all the frauds of his predecessors" for a considerable part of the Rupees coined in the 16th year contained 5½ annas silver and 10½ annas copper. Chait Singh at length forbade their currency

and the loss fell upon "those who were so unfortunate as to have these (Rupees) in their possession."

Nearly 2 lakhs of rupees, also, were annually melted down for the manufacture of lace and rich stuff for which Banaras was so celebrated. The revival of the old practice, in the time of Jagat Deo Singh, the Naib to Raja Mahipat (Mohip) Narain, of collecting some Batta on all non-current rupees also brought a large number of coins in the Mint to be restamped. If to this were added the amount of the species sent annually to different parts, outside, to answer Bills of Exchange, Barlow concluded, it would appear how difficult it was to calculate the quantity of the different species of Sanaut and Sicca Rupees then in circulation. (Barlow classified the coins current in Banaras in two categories: (a) Sanaut and (b) Siccas. The former were coins issued prior to the 17th year of Shah Alam II and the latter from after that year.)

It is needless to point out that the Account is of very great historical and numismatic value. It furnishes us a detailed account of the working of a Mint, its scope and functions, the Duties levied on the different species, the average income and expenditure of a Mint and the amounts of 'Nazrana' payable for procuring the farm of a Mint. The Account is, admittedly, of one particular Mint but in many respects it is a typical one. The details about the working of the Banaras Mint as also the rates of Duties levied in it may very well be true of other Mints, with certain minor modifications.

Certain points of general numismatic importance also emerge out of it. For instance we know that from after Farrukhsiyar's reign the Mint were often farmed out or given in Jagir. The Jagirdar, in his turn, could also farm them out. Short-term farms, usually of one year's duration, appeared to be more in vogue. There was no bar to the same person getting the contract more than once. Even persons against whom charges of fraud had been proved could get the contract again. The great security measures and secrecy associated with the present day working of the Mint do not appear to have been in practice during that period. On the contrary we find the farm of the Mint being given even to a foreigner. Many details of minor but vital importance—like the difference between Sanaut and Sicca Rupees, the different varieties of Rupees like Tirsoli, Machchhlidār, Rikabi, etc., are also given. All these are very much helpful in understanding the working of Mints and the state of Currency during a vital period of our country's history—when the foundations of the English rule in India were being laid.

Appendix 1

Duties on the coinage at the first establishment of Banaras Mint as fixed by Royal Officers at Delhi in the 15th year of Mohammad Shah's reign, corresponding to A. H. 1145.

(A) *Gold Mohars* (weight 9M. 4R. 0C.), Assay 5 Ratti per tola, the same as the Delhi Mohar and current at that time for 12 Sic. Rs. viz. ; Duties on :

(I) Ingots of Gold, Gold Coins of Persia, Turan, Ispahan, Rumania, Syria and Europe coined into Mohars of the above mentioned weight and fineness.

	Rs.	A.	P.	
To Government.	9	0	0	Per cent
To Officers of the Mint.	2	4	0	
To Coiners and Artificers.	0	15	0	
	12	3	0	

(II) Gold Mohars having the stamp of kings of Hindusthan and having once before paid duty, recoined into Mohars of the above mentioned weight and fineness.

To Government.	4	8	0	Per cent
To Officers of the Mint.	2	4	0	
To Artificers.	0	15	0	
	7	11	0	

(B) *Rupees* (Assay 22 *chowlis*, weight the same as Delhi Rupee equal to Banaras weight, 9M. 7R. 0C.)

(I) On Bullion the coins of Persian Turan.

To Government.	0	12	0	Per cent
To Officers of the Mint.	0	3	0	
To Coiners.	0	6	0	
	1	5	0	

(II) On old Rupee bearing the stamp of the king of Hindusthan [for being recoined].

To Government.	0	6	0	Per cent
To Officers of the Mint.	0	3	0	
To Coiners.	0	6	0	
	0	15	0	

Appendix 2

Duties on coinage in the Banaras Mint from the 1st year of the reign of Ahmad Shah (1748).

(A) *Gold Mohars* (weight 9M. 4R. 0C.), Price Rs. 14/0/0.

Old Duties.	9	0	0	Per cent					
Increase by Balwant Singh.	2	12	0						
	11	12	0						
Fees of officers attached.	2	4	0						
				14	0	0			
To officers of the Mint.	0	0	0						
To Assay Master.	1	0	0						
To Coiners and Artificers.	0	15	0						
				1	15	0			
							15	15	0

(B) *Rupees.*

On recoining of old Rupees.									
To Government.	0	6	0						
To Old Duties.	0	3	6						
				0	9	6			
Fees of Officers Attached.				0	4	6			
				0	14	0			
To Assay Master.	0	1	0						
To Coiners and Artificers.	0	4	6						
				0	5	6			
							1	3	6
On Bullion mixed with old Rupee, per cent.							0	5	6

Appendix 3

Receipts and Disbursements of the Banaras Mint in the 5th Year (1763) of the reign of the present king (Shah Alam II) from the beginning of *Poos* to the end of *Kartik*, being 11 months during the farm of Balgovind.

CREDITS

To Duties on Coinage:

	Rs. A. P.			
(A) *Gold Mohars*				
(i) On 2278 @ 25%	569 8 0			
(ii) On 9185 @ 50%	4692 9 3			
		5662 1 3 (?)		
,, (B) *Rupees*				
On 2921148 @ 12%		51120 1 6 (?)		
,, (C) *Pice*		735 1 0		
			57017	3 9
,, Profit on the coinage of the above mentioned amount of Rupees debased to 40 *chowlies*.			51120	1 6
,, Duty on melting silver Bullion into bars for drawing into wires : Tolas 89366, 11 Mashas.			1070	2 9
,, Duty on Gold Leaf for covering the above mentioned bars. Tolas 1303.			246	15 9
,, Nazrana on the Admission of New Artificers.			1117	3 3
,, Fee for the Engraver of the Die (Talbana).			659	0 9
,, Duties on Precious Stones.			392	0 0
,, Escheats of persons dying without heirs. (During this peried the Escheats Department was incoiporated in the Mint Department.)			515	2 0
,, Profits on Monopoly of Lead. (This, too, was part of the Mint Department.)			736	5 9
,, A fine levied on a person detected in coining base Gold Mohars.			10000	0 0

To Cash belonging to Gopal Das attached for his attempting to convey it out of city without a pass.			4000 0 0
„ Profits on Bullions seized from the family of Mir Qasim by Shujauddaula and sent by him to be coined into rupees.			5000 0 0
			131874 9 3[1]
DEBITS			
By Cash paid to Shujauddaula for the Farm per annum.	50,000 0 0		
Deduct one month. (The Account is for 11 months.)	4,000 10 9		
			45833 5 3(?)
„ Cash paid as a present to Raja Balwant Singh per annum.	10,000 0 0		
Deduct one month.	833 5 3		
			9166 10 9
„ To Nawab Nurul Hasan Khan the Nawab's Sazawal at Banaras.	5,000 0 0		
Less one month.	416 10 6		
			4,583 5 6
„ To Fatah Chand.			1,000 0 0
„ To establishment and coiners etc.			1,551 13 9
„ Sundry charges.			1,268 0 0
			67986 8 9(?)[2]
Receipts.	131874 9 3		
Disbursements.	67986 8 9		
Profits.	63888 0 6		

1. This total (annas and pies only) as well as the calculations in item (A) are wrong, owing, probably, to the scribe's mistake. I have, however, left them as they are.

2. Some of the totals in this column too are wrong.

Appendix 4

Duties on coinage in the Banaras Mint from the 8th year (1766) of the present reign (Shah Alam).

(A) *Gold Mohars* (weight 2M. 3R. 6C.), Assay 5.4 Tolas.

	R. A. P.	R. A. P.	
To Government.		14 0 0	
To Officers, etc.	...		
To Raja Balwant Singh.	2 0 0		
To Daroga.	1 0 0		
To Assay Master.	1 0 0		
To Mushriffs.	1 0 0		
		5 0 0	
To Artificers and Coiners.		0 15 0	
			19 15 0

(B) *Rupees* (weight 9M. 6R. 6C.), Assay 22 *chowlies*.

To Government.		0 14 0	
To Raja Balwant Singh.	0 2 0		
To Assay Master.	0 1 0		
To Superintendent.	0 1 0		
To Charity.	0 1 0		
To Mushriffs (Accountants).	0 1 0		
		0 6 0	
To Artificers and Coiners.		0 7 0	
			1 11 0

Appendix 5

TABLE SHOWING WEIGHT, ASSAY, ETC. OF THE RUPEES COINED BANARAS MINT FROM ITS FIRST ESTABLISHMENT TO THE PRESENT TIME[1]

	Assay	Banaras Weight Per Rupee	Calcutta Weight Per Rupee	Intrinsic value less than Sicca	Batta or Current Bazar value than Sicca	Quantity Coined	REMARKS
	Chowlies	M. R. C.	M. R. C.	R. A. P.	R. A. P.	R. A. P.	
	1	2	3	4	5	6	7
Muhammad Shah, 15–22 Years.	22	9 7 0	10 0 0	0 10 0	2 8 0	0	(1) When Raja Balwant Singh received the Farm of the Mint at the commencement of Ahmed Shah's reign he destroyed the records and removed the Qanungoes and public officers (of the Mint). From that period to 17th year of Shah Alam's reign (1776) no records were kept.—*the Farmers carried away their papers in order to conceal the profit they reaped from debasing the coins.* Barlow
	32			0 3 0			
23–28	22	,,	,,	0 10 0	,,	0	
	32			0 3 0			
29–30	22	,,	,,	0 10 0	,,	0	

1. Thurston, while reproducing this Table, omitted Columns 4 and 5 and Section A of Column 7.

A. Ahmad Shah 1st Year	22			„			„	0	10	0		„			0
2–4 Years	24							0	13	0					
	32			„			„	0	2	3		„			0
5th Year	32			„			„	0	2	3		„			0
6–7 Years	26			„			„	0	4	0		„			0
B. Alamgir II 1–2 Years	26							0	1	4					
	28			„			„	0	1	4		„			0
3rd Year	24							0	15	0					
	32			„			„	0	2	3		„			0
4th Year	64	9	6	0	9	7	4	0	7	3		„			0
5th Year	40							3	7	0	5	0	0		
	48	9	7	0	9	10	0	12	11	0	8	0	0		0
6th Year	64							7	3	0	8	0	0		
	100	9	6	4	9	7	4	2	4	0	5	0	0		0
											10	0	0		0

however had it on the authority of Kaundas (Sic), the then Assay Master, that the annual amount of coins (minted in Banaras) varied between 20-30 lakhs. However in the 3-5 years (1762-64) the *amount rose to 50 lakhs for Shuja was then engaged in the invasion of Bihar and "sent the greatest part of the wealth he extorted from Cossum Ally Khan to be recoined in the Mint of Banaras."*

(*B*) The Rupees of the 4-6 years of this reign are also called Trisolee from having the Trident of the Hindu deity Mahadeva stamped on them. They are current primarily in Ghazipur District.

	Assay Chowlies 1	Banaras Weight Per Rupee M. R. C. 2	Calcutta Weight Per Rupee M. R. C. 3	Intrinsic value less than Sicca R. A. P. 4	Batta or Current Bazar value the Sicca R. A. P. 5	Quantity Coined R. A. P. 6	REMARKS 7
C. Shah Alam II 1st Year	26	9 7 0	10 0 0	1 7 0	2 8 0		(*C*) The Rupees of 1-7 years were called Thumka Ghorshashees, Thumka signifying small and Gauhar Shah the name of of the present king previous to his accession.
2–7 Years	40	„	„	3 7 0	„	292148 0 0 855624 0 0	
D. 8–10 Years	22	9 6 6	9 7 6	0 10 0	„	1865875 0 0	(*D*) Called Chowrah or Broad Ghurshashees to distinguish them from Thumkas which Shujauddaula at the desire of Clive ordered to be discontinued.
11–12 Years	26 28	„	„	1 4 0 1 9 0	„	1577380 0 0 1240980 0 0	
E. 13th Year	28	9 6 6	9 7 6	1 9 0	2 8 0	1646190 0 0	(*E*) Called Jhardar from a mark of branch stamped on the coin.
14th Year	„	„	„	„	„	1186684 0 0	
F. 15th Year	„	„	„	„	„	1465387 0 0	(*F*) Called Phuldar having a lotus stamped on it.
16th Year	„	„	„	„	„	1044486 0 0	

G.	17th Year	18	,,	,,	,,	,,	1693421 0 0
	18th Year	,,	,,	,,	,,	,,	1078012 0 0
	19th Year	,,	,,	,,	,,	,,	988118 0 0
	20th Year	,,	,,	,,	,,	,,	965757 0 0
	21st Year	,,	,,	,,	,,	,,	447180 0 0
	22nd Year	,,	,,	,,	,,	,,	669764 0 0
	23rd Year	,,	,,	,,	,,	,,	2209544 0 0
	24th Year	,,	,,	,,	,,	,,	252614 0 0
	25th Year	,,	,,	,,	,,	,,	1784178 0 0
	26th Year	,,	,,	,,	,,	,,	1350330 0 0
	27th Year	,,	,,	,,	,,	,,	1144804 0 0
	28th Year	,,	,,	,,	,,	,,	49370 8 0

(*G*) Sicca rupees of same weight and fineness and which ought to pass current at the same value. These are distinguished by the appelation of Machchhlidar from the head of a fish being stamped on the coin.

SOME SALIENT FEATURES OF BRĀHMĪ ON GUPTA COINS

C. S. UPASAK

The Brāhmī script has a continuous history of its own; and its evolution can be traced since its first appearance as *Dhammalipi* in the Aśokan inscriptions. In early India, the epigraphic records were not always dated; but an approximate age of such inscriptions can be calculated with the help of the palæography of the characters. As ages went on the Brāhmī script underwent a gradual evolution. And till the rise of the Imperial Guptas, the regional shapes, especially 'southern' and 'northern' could be distinguished in the alphabet. Sometimes the letters like *Sa, Ma, La,* and *Ha* are observed to show regional variations during the Gupta period.

In the realm of numismatics, conservatism was a very strong force in ancient India. On any new issue of coins, it was to some extent essential to maintain the similarity with the issues of the predecessor since it was otherwise difficult to get proper circulation and recognition among the people[1]. The early gold issues of the Guptas, therefore, maintained a close resemblance with those of the Kushāṇas to whose imperial position they succeeded in the north.[2] Their coins not only resembled in general appearance, but it is interesting to find that the 'squat and broad' letters of the Kushāṇa period had much influence on the palæography of the Gupta period. The thickness on the top of the letter is conspicuously evident in the inscriptions of the Gupta period. The coin legends also do not dispense with the current trend of the characters. Since the space on the coins was limited, and also that carvings were more complicated, the artisans took special care in preparing the dies; and the shapes were executed with meticulous care. The result was that the letters of the legends on the coins received special attention for securing exactitude. They are usually broad and thick and short and bear close similarity with those on the stone or copper-plate inscriptions. Dr. Altekar rightly points out, 'the letters on the Gupta coin legends usually display the same norms

1. A. K. Narain, 'Numismatic Evidence and Historical Writing', *JNSI*, XVIII, Part II, p. 151.
2. Altekar & Majumdar—*The Vakataka Gupta Age*, p. 278.

which are seen in the contemporary lithic records'.[1] When the copper-plate inscriptions are compared with the legends on the coins, they show similar technique; and thus, palæographically they come to the same group. The reason is obvious. A similar technique is evinced when engraving is made on a metal piece, whether it is executed on a copper plate or on the iron pillar or on the die of a coin. Of course die-cutting required greater care and better craftsmanship than other kinds of engraving on the metal. The copper-plate inscription of Karaitalai of Mahārāja Jayanātha, G. E. 174 (A. D. 493-94)[2] may be of some special significance in this context. There is a peculiar shape of *Ma*—  — found mainly on the Gupta coins. In stone inscriptions it is conspicuously absent. But strange enough, the shape of the letter is found in the above copper-plate (see: in lines 11. 18). This shape of the letter is not due to some regional influence; it is purely an outcome of the technique of engraving on the metal. The formation of this unusual shape of *Ma* may be derived from this shape of the letter—  , when closely examined (Compare in lines 1, 2, 3, 4, 5, 8, 9, 14, 16, 18, 19, 21 with these shape— , and ; in lines 2, 7, 11, 13, 14, 21, 24 and 4, 5, 7, 8, 9, 12, and 6, 7, 11, 14, 23 respectively; and finally this shape in lines 11, 18, 22). Many shapes of one variety of a letter can be accounted for as owing to the engraving on the metal.

On the basis of the shapes of a few letters, viz. *Ma*, *La*, *Sa*, and *Ha*[3], the Gupta Brāhmī is usually divided into two varieties–Eastern and Western. The most distinctive letter is *Sa*. We notice two main shapes of this letter, one with a loop

1. Altekar: *The Coinage of Gupta Empire*, p. 310.
2. Fleet *CII*, III, No. 26, plate XVI, p. 117.
3. Buhler distinguished eastern and western forms only in letters *La*, *Sa* and *Ha* (*Indian Palæography Indian Studies. Past & Present*, Vol. I, No. I, p. 65).

to its left-  and the other with a round knot-  .

The former is most prevalent in the western part of the country while the latter is usually noticed in the inscriptions of the east. But exceptions are very many and astounding. The iron pillar inscription of Chandra stands at Mehrauli near Delhi ; but the shape of the letter *Sa* belongs to the eastern region. We cannot adduce any definite reasons for its appearance in an inscription situated in the western part of the country. Was it a fact that since it was an iron pillar of very hard substance, a highly skilled artisan was called for from the head-quarters in the east, who being more conversant with the eastern style of letters used this form of *Sa* ? This may be a mere guess. How are we to reconcile the occurrence of both the shapes even in one and the same inscription ? In the Deoriya Stone Image Inscription (*CII* Vol. III, No. 68, Plate XL–B, pp. 271 ff.), in the word *Sarvasatvānām*, the first *Sa* is engraved in western style, while the second *Sa* belongs to the eastern group. What reason can possibly be adduced for this coincidence ? It is a problem. Again, the Allahabad Pillar Inscription of Samudragupta (Sircar ; *Select Inscriptions*, Vol. I, pp. 254 ff.) invariably possesses the eastern form of *Sa* in all the places of its occurrence except in a conjunct in *Kausthalapuraka*, (line 20) in which the western shape of *Sa*-  is noticed. The numismatic materials are not free from such exceptional coincidences. We find, for example, both the forms of *Ma*-  ,  -side by side even on one coin (See : *BH*–III-14, *IMC*-XV-4). Sometimes the eastern form of *Sa* appears with the western variety of *Ma* (See : *BH*–I 14, III-9, III-14 etc.). On the basis of the shapes of the letters, it is indeed difficult to locate the regional mints from which the coins were issued. Seemingly it appears that the die-cutters were conversant with both the forms of letters and so they engraved arbitrarily. In this respect, it may also be possible to presume that very likely the die cutters hailed from different parts of the country and so used that type of character with which they were more familiar. In fact on the basis of the data so far available, it is extremely difficult to formulate any definite theory for reconciling these discrepancies.

On the Gupta coins we also notice a peculiar shape of *Tha*-  . This is a very uncommon shape of the letter on inscriptions of the period. However, it can be noticed on some of the inscriptions of western Malwa region. (See : Gangadhara Inscriptions of Viśvavarman, the year 480 Mālava Sambat, *CII* III, No. 17, Plate X, line 30 ; Mandsor Inscription of Kumāragupta I and Bandhuvarman, Ibid., No. 18, Plate XI, line 1). It is also noteworthy that the coins with this shape of the letter *Tha* invariably bear the western shape of *Ma* and *Sa*. May we assign these coins to the western mints ?

It is usually argued that Samudragupta and Kācha were either identical or closely related. Dr Altekar took Kācha as the elder brother of Samudragupta[1] on the basis of 'coins which are usually found associated with those of Chandragupta and Samudragupta in the Gupta hoards'[2]. Palæography of the coins of Kācha and Samudragupta further strengthens the presumption that they stood in close relation. There are a few shapes of the letters *Ga*-  , *Ca*-  *Ja*-  , *Ta*-  , *Ma*-  , *Va*-  and *Sa*-  which are singularly found on the coins of both the kings. For instance the shapes of *Ja* and *Va* are exclusively the same. The appearance of identical shapes of the letters on some of the coins of Kācha and Samudragupta, coupled with other evidences, warrant the presumption of their close relationship.

The silver coins of the period under discussion do not display so nice a craftsmanship as do the gold coins. The silver coins, as pointed out by many, were more or less similar to that currency which was popularised by the Kshatrapas[3] in western India. The characters on the silver coins are naturally a great deal influenced by the southern technicque. The loop on some of the letters, like *A*, *Ra*, *Ga*, *Sa*, *Ta* is a distinctive feature of the Southern Brāhmī. Due to compara-

1. Altekar, *BH*, Introduction, p. XVI LXXV ; also *The Coinage of Gupta Empire*, p. 79-89 ; P. L. Gupta, *JNSI*, XI, Part I. pp. 33-37.

2. Altekar, *Coinage of the Gupta Empire*, pp. 150, 216, 218, 250.

tively lesser space on the silver coins than on those of the gold coins, some of the letters are not well carved. Such forms of *Ga*—  , *Na*—  , *Ca*—  , *Śa*—  , *Bha*—  are probably caused by the paucity of space. The copper coins of the Guptas are not many; but the legends on these coins are similar to those on gold coins. We will, however, discuss the individual letters as found on the Gupta coins in greater detail.

On Gupta coins no initial vowels appear except the first letter of the alphabet, the letter *A*. This letter appears in as many as six shapes with little variations. There are mainly two varieties; one in angular style—  (*BH*—IV-1, XIV-14, XXII-1, 2, 3, 4, 6,: *BMC*—V-11, XIII-13, XIII-1, 2) and the other in cursive thus—  (*BH*-V-15, VI-1, XXII-5, XXIII-1, 2, 5, 10, XXX-15; *BMC*—IV-1, 2, 3, 7, VI-9 10, 12, 13, 14). A peculiar shape is noticed on some of the coins of Samudragupta like this— (See *BH*--IV-14, V-1). This shape may be compared with a similar type found in the Aśokan inscriptions, (Compare: REG-X-4 in *Aṇata*). A straight shape is also noticed sporadically on some of the coins of Chandragupta II (BH-XIV-11, 13, XV-1, 2) and Kumāragupta I (BMC, XIII, 19) which is shaped thus—  .

On the so called Apratigha type of coins of Kumāragupta I a shape of the letter is noticed which is very similar to that found on the inscriptions of Central India (e. g., Sanehi Inscription of Chandragupta II, year 93; *CII*, Vol. III, Plate III-B. p. 30). It is shaped thus— (BH-XXXI-6, 7, 8, 9, 10, 11, 12, 13). It exhibits a clear influence of the

Kshatrapa characters, which are mainly manifested on the silver coins of the period. "The silver coins issued by Kumāragupta I for the use of the Western Provinces continued to be a close copy of the Kshatrapa prototype."[1] The other forms of the letters on this Apratigha type also tend to show a close similarity with the letters of Central Indian region (e. g. *Ma*). Can we assume that the Apratigha type of coins of Kumāragupta I hailed from the Central Indian mints ?

The letter *Ka* is flat and thick at the top with a long vertical having a curved horizontal bar—  . On some of the coins of Kumāragupta I and Skandagupta the horizontal bar is conspicuously much more curved like this–  (*BH*-XX-5, 6, 7, 8, 9, 10, 11, 12, 13, XXIX-9, 11, 14, XXXI-15). Often with the conjunct *Kra*, we notice that the horizontal bar is rather straight. This line is sometimes small—  (*BH*-II-2, 5, 10, III-8, 9, 11, IV-1, 2, 5, 10, 12-14, V-1, 3, VIII-8) and sometimes long—  (*BH*-VIII-11, 12, XI-1, XVI-14, XVII-2, 4, XVIII-5, 12, XXXII-2).

The use of letter *Kha* is not frequent on the Gupta coins. A few coins of Kumāragupta I contain this letter. There the letter is carved in its usual shape— (*BH*-XXX-5, 6, 7, 8). An angular form like this—  is noticed only once (*BH*-XXX-6), which seems to be due to the idiocyncracy of the engraver.

The most common shape of *Ga* on the Gupta coins is represented thus—  . Sometimes on some of the coins of Chandragupta I, Samudragupta, Chandragupta II and

1. Altekar, *The Coinage of the Gupta Empire*, p. 216.

Kumāragupta I a shape very similar to modern *Ga*– —is also seen (See: *BH*-I-5, 7, VI-6, IX-7, X-3, 12, XIV-2, 8, 14, XXI-1, 3, 12, 13; *BMC*-XI-3, 8, XIII-11). On silver coins sometimes the letter is slightly differently carved like— and sometimes in *Gu* it is like this— , which seems to be a mistake since the artisan missed to carve the left vertical. This cannot thus be treated as a variety. Cursive forms of the letter— — are also noticed sometimes here and there. This form can be found on the coins of Kācha and Samudragupta both. (*BH*—VI-3, 4, XXIII-5 XXVII-5, XXXI-3, 8, 13; *BMC*-II-1, 2, 3, 4, 5, II-6, 11, III-6, 15, IV-15, V-1, 2, 3, 7, XVII-12, 14). In fact it is similar to the most common shape . On one of the coins of Samudragupta (*BH*-VI-4) both the shapes can be noticed.

The letter *Gha* does not occur frequently in the legends of the coins; only a few forms are noticed of the letter. The most common shape is formed like this— or (*BH*-VI-9, 10, XXVII-1, 2, 4, 8, 10, XXXI-6, 10, 11, 12, 13, XXXII-4; *BMC*-II-14, XV-1, 2, 4,). In one of the coins of Chandragupta II (*BMC*-IX-11), the letter is conjoined with *Ṅa* as— in place of *Ṅha*. Allan has read it as *Ṅha* although it is clear *Ṅgha*.[1] The mistake was made probably by the die-cutter who was a semi-literate and could not distinguish *Siṅha* from *Siṅgha*. On some of the coins of Kumāragupta I these shapes are also noticed— (BH-XXVII-11) and (*BH*-XXVII-12, XXXI-7, 9). The letter *Gha* has a close similarity with the letter *Ya*; but the most distinctive feature

1. Allan, *BMC*, p. 44.

is the middle vertical line of the letter. While it tends to remain smaller than the other two side-lines in the letter *Gha*, it is the longest in the letter *Ya*. Sometimes all the three lines are seen to be equal. (e. g. *BH*-XXVII-8) in the letter *Gha*.

The letter *Ṅa* never appears alone. It is always conjoined in the conjunct *Ṅha*; but the letter is distinct on many coins and it is usually shaped thus—  (*BH*-XVI-8, 9, 10, 11, 13, 15, VII-1, 2, 3, 5, 7, 10, 11, 12, 13, 14, XVIII-2, 3, 4, 5, 6, 9, XXVIII-2, 3, 4, 7, 6, 7, 10, 14, 15, XXIX-1, 2, 3, 5, 7, 8, XXX-1; *BMC*-VIII-12, 13, 15, 16, 17, IX-1, 2, 3, 8, 9, 11, 12, 13, XIV-1, 2, 4, 6, 10, 11, 12). An indistinct shape with its upper line slightly curved—  (*BH*-XVIII-7, *BMC*-5) is noticed on some of the coins of Chandragupta II. A cursive shape—  (*BMC*-XIX-3) of the letter is noticed on one coin of Kumāragupta I. These forms do not suggest any regional varieties since they are apparently due to the inadvertence of the die cutter.

The most popular form of *Ca* is shaped thus—  — which can be seen on many coins of Chandragupta I, Kācha, Samudragupta, Chandragupta II, Kumāragupta I, Vishṇugupta. A similar shape with its straight lower base like this —  or —also appears on the coins of the Guptas (See; *BH*-I-2, 3, 7, 9, VII-12, 13, VIII-2, 5, 7, 9, 11, 14, 14, IX-3, 4, 5, 7, X-4, 5, 10, 13, XI-5, 7, XII-4, 7, 8, 10, 11, 12, XIII-1, 2, XIV-10, XV-7, XXIV-12; *BMC*-III-8, 9, 13, VI-13, 16, XXIII-10). Another variety, usually noticed on some of the inscriptions of Kushāṇa kings (See *Prā. Li.*, pl. VI)-  is found exclusively on some of the coins of Chandragupta II and Kācha, (Kācha-*BH*-VI-11, Chandragupta II, *BH*-IX-15, *BMC*-XI-3). On the silver coins of Chandragupta II the letter is shaped thus—  , which seems to be an influence of

the south, as we notice it to be the case in some other letters on the silver coins.

The letter *Cha* is of usual style—  with the conjunct *Chha* on some of the coins of Chandragupta I and Kācha coins. The lower portion usually possesses two good circles; but sometimes we notice irregular shapes.

The letter *Ja* has two main shapes, one with its straight vertical line  , and the other with a slightly bent line like this—  . The former can be traced back to the Aśokan inscriptions[1] and the latter is exactly similar to that of Śātavāhana inscriptions (See: Nasika Cave Inscription of Vāśishṭhiputra Pulumāvi: *Select Inscriptions*, Plate XXXVI; p. 196. Junagarha Rock Inscription of Rudradāman I, Ibid., Plate XXXIII, p. 169; Nagarjuni Konda of Virapurushadatta, Ibid., Plate XL, p. 222, etc.). The other shape is the cursive one—  (*BII*-V-13, XIV-6 (reverse), XV-6, *BMC*-V-2, VII-1, 2, XXIII-15). This shape of *Ja* is most popular in the Aśokan Inscriptions with slight modification.[2] The fourth is angular—  , which is not very common; but can be seen on some of the coins of Kācha and Samudragupta (*BMC*–IV-12, V-1, II-19). This also is not unknown in the Aśokan inscriptions.[3]

The letters *Jha* and *Ña* do not occur on the legends of the Gupta coins; while the letter *Ṭa* occurs very seldom. It has a horizontal line at the top—  , which may sometimes be mistaken for *Ḍa* (*BII*-XXXXII-4; *BMC*-XXIV-3). Since its appearance is very rare, we do not notice any other variety of the letter.

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1. Cf. Upasak, *History and Palaeography of Mauryan Brāhmī Script*. Appendix No. 13 (7), p. 229.
2. Ibid., Appendix No. 13 (1), p. 228.
3. Ibid., p. 66.

The letter *Tha* does not appear on the Gupta coins, while *Ḍa* is indistinct. The letter *Ṇa* is noticed in both its forms as found on the Gupta inscriptions. They are shaped like this—  (*BMC*-XV-13, XXIN-6, 9) and like this—  (*BMC*, XXVI, 1, 3, 5, 6). Obviously both the shapes are of one group. Notice another shape—  , which belongs to a different variety found on some of the coins of Chandragupta II and Kumāragupta I (*BH*-XVI-12, 13, XXVI-1). This variety is also noticed on the inscriptions of the period (cf. Sanchi Pillar of Chandragupta II, Year 93, *CII*-Vol. III-plate III-B, p. 30, Bilsad Stone pillar Inscription of Kumāragupta I Year 96, Ibid. Plate V, p. 43). This shape seems to be the derivative of the ancient Aśokan Brāhmī.

The letter *Ta* is represented in many ways. The most popular shape is the flat oue—  or  . Sometimes the two parts remain apart without the intermediate link like this—  (*BH*-II-9, 12, III-10, V-1, VI-1, XXIV-13, XXV-5, 6, 7, XXVI-1, XXX-12, XXXI-10-11 ; *BMC*-XII-16, XIV-7, 8, XVIII-3, 4,7, 12, XIX-14, XXI-14, XXII-4, XXIV-14). This detached shape is obviously due to the careless cutting of the die and should not be treated as a variety. A shape with its cursive loop like this—  — is noticed on the coins of Samudragupta, Kācha and Kumāragupta I (*BH* I, 15, II-1, 4, 7, 14, 15, III-5, 6, IV-10, 12, V-7, 9, 10, 11, 12, 13, VI-14, 15, VII-6, 10, XIII-13, XIV-2, 4, 5, XV-11, 13, XX-11, XXI-1, 3, 6, XXVIII-11, XXX-9). This form clearly shows the influence of the Āndhra coin-legends. When the letter appears with the conjunct, it is usually shaped like this—  (*BH*-I-2, 7, V-7, VI-3, 9, VII-14, XI-6, 8, 9, XXVII-13-14, XXX-5). On silver coins it has this shape— 

(*BMC*-XVI-21, 22, 24, 29), which may be compared with the shape of Mauryan period.[1] Another angular variety of the letter—  is noticed on some of the coins of Samudragupta, Kācha and Chandragupta II (*BH*-II-5, 11, VII-9, XV-12). A different variety of this group is formed like this—  —, which can be seen on some of the coins of Samudragupta and Chandragupta II (*BH*-III-2, 9, XIV-1, 10), and sometimes it has the shapes thus—  , (*BH*-III-14, 15, V-6; *BMC*-I-11, 12, II-1, 2, 5, IV-8, 9, 10, 13, 15).

The most common shape of the letter *Tha* on the Gupta coins is the same as noticed in the Aśokan inscriptions— (*BH*-IV-6,11,14,15, V-4, XVI-12, XVIII-1,2, XXII-4, XXV-11; *BMC*- IX-13). Sometimes the circle is noticed without a dot-  —, which is just an oversight (*BH*-IV-2, 9, 12, XXV-15).

Dr Altekar seems to have considered it to be a variety since he reproduced this shape as a regular letter in his eye copies of the legends—*Rājādhirājaḥ Pṛithvimavitya divaṃ Jayatyāhṛitā-vājimedhaḥ* and *Rājādhirājaḥ Pṛithivimavijitya Divaṃ Jayatya-hṛitavājimedhaḥ*—(See, *BH* Plate XXXIII-4, 5). But this does not seem to be correct, as we find the letter with a dot (e. g. *BH*-IV-6, 9 etc). Another variety of *Tha*—  —is mainly noticed on some of the coins of Samudragupta (*BH*-V-15, VI-1, 2; *BMC*-IV-1, 2, 3, 4, 5, 6, 7, V-9, 11). This shape is very uncommon and seldom appears in the inscriptions. Some of the inscriptions found in the Malwa region display this form of *Tha* (e. g, Gangadhara Inscription of Vishvavarman, the year 480 Mālava era (A. D. 424-25), *CII*. Vol. III, No. 17, Plate X-line 30; Mandsor Inscription of Kumāragupta I and Buddhavarman, the year 493, Mālava era (A. D. 436-37), (*Ibid* No. 18, Plate XI, line 1). The coins which bear this shape of

1. Upasak, *History & Palaeography of Mauryan Brāhmi Script*—Appendix No. 22 (1), p. 244.

Tha also possess the most common form of *Ma* of central India region and *Sa* exclusively belonging to the western style as most prevalent in this area. May we assume that the coins having this shape of *Tha* belong to the mints of the Central India region ? Another angular shape of this variety— —is noticed on some of the coins of Kumāragupta I (*BH*-XXII-1, 2, 3, 6). Obviously it is a careless designing.

The letter *Da* is most popularly represented thus-  , with a flattened top and curved base. Other forms belong more or less to the same variety. For instance this shape-  , which has a very long curve is noticed on some of the coins of Chandragupta I (*BH*-I-1, III-12, 13) ; and so also a shape with its straight horizontal bend-  appears on some of the coins of Chandragupta I, Samudragupta, Chandragupta II and Kumāragupta I (*BH*-I-15, II-7, 10, 11, III-8, 9, 10, 12, 13, V-6, 12, VI-1, 2, 5, VIII-12, 15, IX-1, XI-9, 10, 13, 14, XII-11, XXVI-14 : *BMC*-I-2, 6, 8, 10, 11, 12, 13, II-3, 5, III-2, 6, 7, 8, 9, III-3, 4, 5, 6, 11, 12, VI-1, VII-5, 7, VIII-6, 7, 10, XI-14. We also come across shapes like these-  (*BH*-VII-13,14, VIII-6, 8, IX-4, XV-5, 11, 12, 15, XVI-4, XXII-15, XXXII-9) or-  (*BH*-IX-10, X-8, XVI-12 ; *BMC*-VI-16), These small variations are probably due to the limited space on the coins. We also notice such shapes of the letter which have no serif at the top. The omission of serif—  (*BH*-II-14, XXVIII-4, 5, *BMC*-VI-16),  (*BH*-V-11, *BMC*-II-1, 2, III-1, 2, VI-5, 6, XI-11, XVII-19) is probably due to the inadvertence of the die-cutter.

The letter *Dha* has the usual shape-  - (*BH*-IV-1, 2, 6, 7, 8, 9, 12, 13, 14, 15, VIII-11, 12, IX-4, XI-9 ; *BMC*-VI-16, 18, V-11, 12, 13, XIV-11, 12, 13, XVI-20) ; but sometimes the

vertical line is found to be elongated like this-  (e. g. See : *BH*-IV-1, (reverse), 6 (reverse), (*BMC*-VI-2). This shape on the reverse of the same coin suggests different hands used in carving the legends on the die. Sometimes we also notice oval shape of the letter—  (*BH*-IV-3 (reverse), XIV-13, XXVIII-4 ; *BMC*-V-11, VI-7, VII-1, 2, X-15, XVI-27, XVII-2, 10, XIX-3).[1] Sometimes the shape is reversed as—  —(See : *BH*-IX-13, XVIII-12, XXX-12 ; *BMC*-V-1, 2, 4, 10, VI-4, XVI-20, 27, 28, 30, XX-5, XXXIII5).[2] This is not a common shape of the period ; but may be a survival of the Mauryan prototype.[3] An irregular shape designed thus—  —is also seen in the coins of Samudragupta, Chandragupta II, Kumāragupta I and Skandagupta (*BH*-IV-4 (reverse), 7 (obverse), 11, V-1, VIII-2, XIV-12, XXVIII-2, 6, 7, XXXII-7 ; *BMC*-V-9, X-17, 18, 20, XIV-16, XVI-1, 8, 24, 28, XVI-15, 16, XX-3).[4] On a coin of Chandragupta II, we come across a shape almost as square-  (*BMC*-VI-8), which looks like the letter *Ba*. Obviously it is an aberration.

The most common shape of *Na* is represented thus-  or  on the Gupta coins and the same is found in the inscriptions. At some places its upper and lower parts are detached-  (See : *BH*-X-11, 12 ; *BMC*-III-11, 12, IX-13,

1. Cf. Junagarh Rock Inscription of Skandagupta, the year 136, 137, 138, *CII*, Vol. III, No. 14, Plate VIII, line 1.
2. This shape can be seen on the Gupta inscriptions, e. g. see Mandsor inscription of Kumāragupta I and Bandhuvarman, *CII*, Vol. III, No. 18, Plate XI, line-2. There seems to be a confusion since the beginning.
3. Upasak, *History & Palaeography of Mauryan Brāhmī Script*, Appendix No. 25, p. 255.
4. A similar shape can be compared with that of the Karamadanda Inscription of Kumāragupta I, *EI*, No. X, pp. 71ff.

XVIII-7, XXII-11, 12). A shape sporadically found both in the inscriptions and the coins is noticed thus—  or

(For the former see : *BH*-XXIX-3, 4, 5, XXX-2 (reverse), XXXII-3 (reverse) and for the latter see : *BH*-XII-12, XIII-1, 2, XVII-12, XXI-1, XXIII-1, 2, 3, 4, 5, XXIV-5, 9, 10, XXVI-14, XXVII-2, XXX-1 ; *BMC*-XI-3.). As on the coins so on the inscriptions both the varieties—  ,  —appear side by side (e.g. See : Mandsor Inscription of Kumāragupta I and Bandhuvarman, *CII*-Vol. III, No. 18, Plate XI-lines 2 and 19 : Bhitari Pillar Inscription of Skandagupta, *Ibid.* No. 13, Plate VII-lines 2 and 8). This coin coincidence suggests that it is not possible to ascribe them to local variation. The latter form may be a survival of the Mauryan prototype. Both these shapes were prevalent in Northern India. On silver coins of the Gupta period an abridged form of the latter is sometimes noticed especially in conjunct letters thus-  (See : *BMC*-X-15, 17, 18, 19, XX-22). It is sometimes carved as thus—  (*BMC*-IV-8, 9, 10, 13, 15, 16). Obviously these shapes are due to exigency of space on the coins.

The letter *Pa* usually has both the tops flattened  ; but sometimes only the left line possesses the serif—  . In some cases both the lines are plain verticals-  (*BH*-XXXI-6, 7, 13 : *BMC*-X-17, XV-15, XVI-14, XXI-3). This plain shape is very rare, since during the period under review, the flattened tops were commonly prevalent. The cursive shapes of the letter with serif on both the tops-  (*BH*-II-5, 11, 14, III-8, 10, IV-1, 2, 3, 5, 9, 14, 15, V-1. 3, 5, VI-2, IX-7, 11, X-9, XXII-14, XXVIII-2, 3,) as well as on the left top only- (*BH*-V-12, VI-8; *BMC*-XIII-11, XVI-3, 11) are also noticed. These are obviously carelessly drawn shapes.

The letter *Pha* does not occur in the legends of the Gupts coins; while the letter *Ba* appears on a few coins in which its shape is a square—  (*BH*-XXII-1, 2, 5, XXVII-1, 2, 8, 10, 12, 14, XXXII-5, ; *BMC*-13, 14, 15). It may be pointed that the shape of the letter has practically undergone little change since the Aśokan period during which irs shape was also a square.

The most common shape of the letter *Bha* is shaped thus-  (*BH*-VI-15, VII-2, 3, 7, 8, 9, XIII-11, 15, XIV-6, 10, XV-1, XVI-15, XVIII-11, XXXII-9 : *BMC*-X-4, XVI-14, 21, 24, 25, XVII-4, XX-14, 21, XXI-2). This form is commonly found in the inscriptions. A similar shape is sometimes noticed on some of the coins of Kācha, Chandragupta II, Kumāragupta I-  (BH-VI-12, 14, VII-10, XXII-7, ; BMC-X-10). Another variety of the letter with both the sides set apart—  occurs sometimes in the coins of Chandragupta II, Kumāragupta I and Skandagupta (*BMC*-IX-14, XVI-14, 21, 22, 3, 26). A shape of *Bha* similar to that of the letter *Ta* occurs on some of the coins of Kumāragupta I and Skandagupta—  (*BMC*-XVI-27, 28, XVII-1 XX-19). A shape which is also noticed sometimes in Aśokan inscriptions[1] appears on the silver coins of Kumāragupta I-  (*BMC*-XVII-9-11, 12, 13, 14, 17, 20, XVIII-16, 18). Obviously it is not a regional variety.

There are two main varieties of the letter *Ma* in the Gupta period. These are shaped thus—  and  . The former is sometimes designated as the western variety and the latter as the eastern.[2] But it should be borne in mind that

1. Upasak, *History & Palæography of Mauryan Brāhmī Script*, Appendix No. 30, (6), p 270.
2. Altekar, *BH*-Introduction, p. CXXVIII-CXXIX) and Ojha (*Prāchinalipimālā* p. 50-61) speak eastern and western ; and rightly point out that such distinctions are not always

either of the forms is not found to be the exclusively characteristic form of a particular region. The so-called eastern form is found on the western inscriptions. And sometimes both the shapes are found in the same place (e. g. See : Mathura Inscription of Chandragupta II, *CII*, Vol. III. Plate III-A, lines 6, 8, 10 and Mathura inscription of Chandragupta II, G. E. 61, *EI*, Vol. XXI, p. 8). As in the inscriptions, so also on the coins both forms are found together, e. g. both the varieties of the letter are found in the same coin (e.g. See : *BH*-II-12, 15, III-13, 1, 14 ; *BMC*-I-1, 2, 3, 4). It is indeed very doubtful to assume that these forms indicate regional characteristics and thereby help te determine the local mints.[1]

The so-called western form of *Ma*— — is to be seen on all the coins of Gupta kings ; while the other shape supposed to belong to the eastern region is also found on the coins of all Gupta kings except those of Chandragupta I, in which another form of the letter, viz.-  -appears. But this shape is noticed on the coins of almost all the kings of Gupta period ; and sometimes it appears side by side with this shape of *Ma*—  (See : *IMC*-Plate XV-4). Dr Altekar is of the opinion that his shape—() has emerged from the letter with the 'triangular base' and observes, "In some cases there is no triangle in the lower limb of the letter, and we have only two slanting lines meeting on the base line"[2]. But this does not seem to be correct. We believe that the so-called eastern variety—  was the originator of this shape of *Ma*—  , in which the base is a line, not a triangle. The Karaitalai Plate of Mahārāja Jayanātha of the year 174 (A.D. 493-94) (*CII*, Vol. III-No. 26, Plate XVI, p. 117) throws some light in this context.

found to be true. Buhler distinguishes eastern and western form of some of the letters but omits the letter *Ma* (*Indian Palaeography–Indian studies Past & Present* p. 65) See also Fleet : *CII*, Vol. III, p. 26.

1. Altekar, *BH*-introduction : p. CXXIX.
2. ibid.. p. CXXIX.

Here we notice the usual shape—  (Lines : 1,2,3,4,5,8, 9,14,16,18,19,21) or— (Lines : 2, 7, 11, 13, 14, 21, 24) along with some other forms of this variety, such as—  (Lines : 4 (in *Mahā*, 5,7,8,9,12,13,22),—  (Lines : 6,7, 11,14,23) and also this shape— (Lines : 11 in *Vilopyā-numodanīya* ; 18 in *Modati* ; 22 in *Mayā*. Again in the Khoh Plate of Jayanātha, the year 177 (*CII* Vol. III, Plate XVIII) a similar shape is noticed in line 14 in *Yaścaimām* ; see also in the Khoh Plate of Mahārāja Sarvanātha, year 214 (A.D. 533-534) *CII*-Vol. III-No. 31, Plate XX in line 6 in the word *Mahādevyām*, the shape of *Ma* is very similar to it. The letter *Ma* in line 3 in *Mushi* of the Mandsor Inscription of Yaśovarman (*C.I.I.*-Vol. III, No. 33, Plate XXI) and in line 16 in *Karma* and in 20 in *Nāma* of the Mandsor Inscription of Yaśodharaman and Viṣṇuvarman can also be compared with this form. Moreover this shape of *Ma*—  is more conducive to evolving this form of *Ma*—  — than the other form with a triangle at its base—  . To derive the former from the latter is a far-fetched guess, since the Karaitalai Plate illustrates the derivation of the shape of the letter. We have not yet met with any mutilated form of this shape— — in which only the upper lines are drawn. Whenever a short or mutilated form is required, the letter is carved smaller rather than omitting any of its portion. Perhaps the fork at the top of this shape—  —prompted Dr Altekar to observe that in absence of a triangular base we have only two slanting lines meeting on the base line. On the contrary it is plausible to hold that metal engraving was to some extent responsible for the appearance of this shape—

Here we notice the usual shape—  (Lines : 1,2,3,4,5,8, 9,14,16,18,19,21) or—  (Lines : 2, 7, 11, 13, 14, 21, 24) along with some other forms of this variety, such as—  (Lines : 4 (in *Mahā*), 5,7,8,9,12,19,22),—  (Lines : 6,7, 11,14,23) and also this shape—  (Lines : 11 in *Vilopyā-numoda-nīya* ; 18 in *Moduti* ; 22 in *Mayā*). Again in the Khoh Plate of Jayanātha, the year 177 (*CII* Vol. III, Plate XVIII) a similar shape is noticed in line 14 in *Yaścaimām* ; see also in the Khoh Plate of Mahārāja Sarvanātha, year 214 (A.D. 533-534) (*CII*-Vol. III-No. 31, Plate XX in line 6 in the word *Mahālayām*, the shape of *Ma* is very similar to it. The letter *Ma* in line 3 in *Mushi* of the Mandsor Inscription of Yaśovarman (*C.I.I.*-Vol. III, No. 33, Plate XXI) and in line 16 in *Karma* and in 20 in *Nāma* of the Mandsor Inscription of Yaśodharaman and Viṣṇuvarman can also be compared with this form. Moreover this shape of *Ma*— is more conducive to evolving this form of *Ma*—  — than the other form with a triangle at its base—  . To derive the former from the latter is a far-fetched guess, since the Karaitalai Plate illustrates the derivation of the shape of the letter. We have not yet met with any mutilated form of this shape—  — in which only the upper lines are drawn. Whenever a short or mutilated form is required, the letter is carved smaller rather than omitting any of its portion. Perhaps the fork at the top of this shape—  —prompted Dr Altekar to observe that in absence of a triangular base we have only two slanting lines meeting on the base line. On the contrary it is plausible to hold that metal engraving was to some extent responsible for the appearance of this shape—

 — from the usual variety— —, since the former is noticed on the copper plate inscriptions also. The die-cutting and plate-engraving may have a common technique and so manifest similar shapes of the letters.

There are a few other minor varieties of the letter *Ma* found on the Gupta coins. The lower triangle sometimes becomes a circle on some of the coins of Kumāragupta I—  (*BMC*-XVI-18, 19, 21, 22, 23). A similar form can be seen in the Aśokan inscriptions.[1] We also come across the letter resembling letter *Pa*—  (*BMC*-I, 1, 2, 3, 4, IV-3, XVI-27, XXI-5, 7,) ro  (*IMC*-XV-8). The other shapes such as—  (*BMC*-II-1, 2, IV-10, 15, 16) or —  —(*JNSI*-Vol. XIV, plate X-11) are also seen here and there, which are also observable in the inscriptions.[2]

The most common shape of *Ya* on the Gupta coins is formed thus— . This variety is also most prevalent on the inscriptions of the period. It is sometimes carved thus—  (*BII*-III-2, 3, 6, 8, 9, 15, IV-10, V-2, 6, 14, XVIII-10, XX-8, 11, XXIII-9, XXIII-1-4, XXXII-10; *BMC*-XIV-2, XIX-4). Another variety of the letter is angular —  —(*BII*-I-2, 3, 5, 8, XX-12, XXII-6, XXIII-7, 8, 14, XXIV-3, 4, 5, XXV-3, XXVIII-4; *BMC*-XIII-10, 14, XVIII-1, XXI-19, XXII-6, XXIII-14). A similar shape is also

1. Upask, *History & Palaeography of Mauryan Brāhmi Script*, Appendix No. 31 (9), p. 274.
2. See: Manakuwar Stone Image Inscription of Kumāragupta I year 129, *CII*, Vol. III, plate vi-A, line 1 and 2; and Damodarpur Copper Plate Inscription of Kumāragupta I, *EI*- Vol. XV, line 7.

noticed—  – (*BH*-XVII-12, XXII-4, XXXII-11). Sometimes cursive form thus—  —is also found in some of the coins of Gupta kings (*BH*-I-11-13-14, II-8-10, 15, XXVIII-2, 6, 7; *BMC*-III-2, XXII-1). A peculiar shape in angular style formed thus—  or  is found on some of the coins of Kumārgupta I and Skandagupta (*BMC*-XIII-9, XIII–8, XIX-1, 2, 7, XXI-16, 17, 18, 22, XXII-4). It may be pointed out that a similar shape is noticed in the Meharauli Iron Pillar Inscription of Chandra (*CII* Vol. III, No. 32, Plate XXI-line 5). Is it due to the metal engraving? Another variety of the letter--  (*BMC*-XXIV-6, 7, 8, 9) is also found on some of the coins, which is not unfamiliar in the inscriptions, but it is very rare.[1]

The letter ***Ra*** has a simple shape, a line with a thick top—  . This shape is most common; but sometimes it is pointed—  or  . On silver coins we notice the southern influence since the letter has a tail— or 

(See : *BMC*-X-15, 17, 19, 20, XVI-1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 17, 19, 20, 23, 24, 25, 27, XVII-10, 20, XVIII-24, XX-3, 4, 5 XVI-17, 21, 25, 26, 28, 29, 30).

The Gupta inscriptions display two main varieties of the letter *La*; but in the coins only one variety is noticed with some minor shades. The most common shape of the letter is—  . Sometimes due to limited space on the coin, it is shaped thus— (See : *BH*-I-1, 6, XXXII-5 ; *BMC*-III-1, 2, 5, 9, 10, 11, 12, 13, 14). The conspicuous absence on the Gupta coins of the so called eastern form of *La*, which is simpler in shape, is difficult to account for.

1. Cf. Sumandal Plates of Prithivivigrahabhaṭṭāraka, G. E. 250, *EI*, Vol. XXVIII, No. 16, line 1, p. 71.

This fact seems to have an important significance. The variation cannot be traced to any particular provenance. It is one of the alterative forms used indiscriminately in the inscriptions. It may not be risky to surmise that this form—

 —became handy in fluent writing which had more scope in inscriptions than in coins for exiguity of space.

The letter *Va* has a simple triangle with a top horizontal line—  . This shape is most common. Another similar shape with sides parting with a broader serif—  —is also noticed on many coins (*BH*-I-14, II-1, 5, 7, 8, 10, 11, 14, III-9, 10, 11, 12, V-2, VI-1, 4, VII-1, 2, 4 (obverse), 12, 13, 14, 15, XVII-1, 14, XVIII-11, 12, XXII-1, XXVIII-7, XXXII-9 *BMC*—I-6, 7, 11, 12, II-3, 5, IV-6, III-3, 4, II 6, 11, 13, VI-1, 4, 7, VIII-1, 12, 17, IX-1, 2, 9, 11, 12, X-4, 12, XVI-20, XX-25, XXI-2, 7, XXII-7). On silver coins of Kumāragupta I, the letter is shaped thus—  or , which are obviously due to the paucity of space on the coins (*BMC*—XVI-24, 25, 26, 27, 28, 30, XVII-1, 2, 4, 9). On some of the coins of Chandragupta I, Samudragupta, Chandragupta II and Kumāragupta I, the triangle at the base has somewhat a round form—

 (*BH*—II-4, 12, 15, III-6 (in *Divam*) XII-7, XXIX-5, 6; *BMC*-I-1, 3, 4, 9, 10, III, 1, 7, XIV-1, XV-3, 4, XVI-18, 20, 21, 22, XVIII-16). A similar shape—  —is noticed exclusively on the coins of Samudragupta and Kācha (*BH*-I-15, VII-7, *BMC*-II-9). Again a shape thus— —is also found on the coins of Samudragupta and Kācha (*BH*-III-9 (in *Vata*), 12 (in *Vata*), 15, VII-6). Does this suggest some intimate relation between the two Gupta kings ?[1] In one or two coins of Chandragupta II and Prakāśāditya the letter is depicted with

1. See : Altekar : *BH*, p. LXXIV-LXXVI.

almost the same shape as that of the Aśokan period thus—  (*BMC*-VI-8; *BII*-XXXII-10).[1]

The most frequent shape of palatal *Śa* as represented on the Gupta coins is shaped thus—  or . On some coins, the horizontal line inside the curve is absent,—  or  , which seems to be an oversight on the part of the artisan. This shape is usually manifested in the conjunct *śca* or *Śri* (*BII*-IV-1, 5, 6, 9, 11, 13, 14, XIV-10, 12, XX-15, XXVII-3, XXX-6), though at some places it is noticed independently (e.g. *BII*-III; *BMC*-I-5, 12, II-5, IV-8, 9, 11, VI-5, 9, IX-14, III-5, 15, XII-18). On the silver coins the aberration is frequent in the conjunct *Śri* (See: *BMC*-X-14, 15, 17, 18, 19, 20, XVI-5, 6, 12, 15, 16, XVII-8, 15, 16, 16, 19, 22, 28, XX-3, 4). On some of the copper coins of Kumāragupta I, we find a slightly different shape thus—  (*BMC*-XVIII-21, 26).

On Gupta coins the cerebral *Sha* never appears alone. It is always conjoined with *Ka*. There its shape is usually thus—  (See: *BII*-XV-8, 9, 10, 12, 15, XVI-1, XXII-8, 14, XXV-6, XXVIII-14, 15, XXIX-1, 2, 3, 4, 6, XXX-1; *BMC*-VIII-2, 4. 5, 6, 7, XIV-6, 7). In some cases its middle line is placed slant-wise—  (*BII*-XV-12, 13). Other shapes of the letter are not to be seen since its use is very rare.

On the coins of the Gupta kings, the dental *Sa* is mainly represented in the so called western style— or  On some coins we notice a shape very similar to ancient form,[2] thus— ,  (*BII*-I-13, II-1, 7, (in *Samara*),

1. Cf. Upasak, *History & Palæography of Mauryan Brāhmi Script*, p. 258.
2. See: Upasak, *History & Palæography of Mauryan Brāhmi Script*, p. 291.

8 (in *Samara*), 10, 14, 15, III-1, 7, 10, IV-1, 2, 4, 5, 10, 11, 12, 14, 15, V-1, 2, 4, VI-11-14, 15, XVIII-2; *BMC*-I-1, II-9, V-7, 13, 14, VIII-12, IX-10, XIV-3, 6). This variety mainly appears on the coins of Samudragupta and Kācha. This fact again signifies the close relationship between the two kings. The so called eastern variety of the letter *Sa* is very rarely seen on the Gupta coins. Dr Altekar overlooked this letter altogether,[1] although it can be seen on some of the coins of Samudragupta–  or  (*BH*-I-14, III-9,12,14,15,V-6, 8, 15, *BMC*-I-11, 12, 13; *IMC*-I-XV-7, *JRAS*-1889, Plate I-8). Dr Altekar observes, "it has been pointed out for the first time that the so called eastern variety is confined to the early rulers and there also in the letters *Ma* and *Ha* only. *Sa*, *Sha* and *La* show no eastern forms."[2] We have seen above that the so called eastern form of *Ma* is not confined to the early rulers since it is noticed on the coins of Kumāragupta I, Skandagupta and Puragupta also. And it is also difficult to ascribe them to regional mints on the basis of the forms of letters. The eastern form of *Sa* is to be noticed with western form of *Ma* (e. g. *BH*-III-14); and sometimes both the letters belong to eastern group (e. g. *BH*-V-6) on the same coin. It is thus unwarranted to account for the differences by recourse to the theory of regional mints.

As pointed out by Bühler and others[3] there are two main varieties of *Ha*. The most common form on the coins is thus-  . In some cases it is seen with a longer hook-  (e.g., See; *BH*-XX-14, XXIII-1, 4, 7, XXVIII, 15; *BMC*-VI-4, VII-1, 2, 18, XII-6, XIII-14, XIV-1, 3, XV-11) The other so-called eastern variety is primarily noticed on the coins of Kumāragupta I; and very rarely on those of Samudragupta and Chandragupta II. It is shaped like this— 

1. Altekar, *BH*—Introduction, P. CXXVIII, Preface, p. 32; Buhler did not notice any eastern or western form of *Sa* (*Indian Palaeography-Indian Studies, Past and Present*, Vol. I, No. 1, p. 65).
2. Altekar *BH*—Proface, p. 32.
3. Buhler, *Indian Palaeography, Indian Studies-Past & Present*. Vol. I. No. 1, 9, 65; Altekar, *BH*-Preface, p. 32.

(*BH*-XIII-4, XX-4, 5, 6, XVI-8, 11, 12, 13, 15, XVII-1, 2, 3, 4, 7, 8, 11, 13, 14, XVIII-1, 3, 6, 8, 9, *BMC*-V, 2, 3, 7, VI-7, 9, XI-4, XVI-21, 23, 24, XVII-1, 4, 8, 1115, 18, 28, 29,). On one coin of Kumāragupta I, the letter *Ha* appears with a strange shape which is exactly the reverse of the usual form  *BMC*-XVI-30). This is obviously due to the inadvertent engraving of the usual form in the die, which ought to have been put in the reverse in order to give out the proper shape in the impression. The eastern form of *Ha* is usually found with the conjunct *Nha*; but sometimes the other form is also noticed (e.g. See : *BH*-XXVIII-2, 3, 4, etc. as— ). On the basis of the shapes of the letter it is difficult to assign coins to the eastern or western mints. On some of the coins we find eastern *Ma* with the western form of *Ha* (BMC-V-2) ; while sometimes both the letters *Ma* and *Ha* belong to the western group.

The medial signs on the coins follow the same style as in the inscriptions. The sign for *Ā* is usually denoted by a slanting stroke to the right (*Rā*) ; but sometimes it is at the top—  or (e. g. See : *BH*-VII-8, 9, 10 in *Kā* and *Rā*). Medial signs for *I* ( —*VI–BH*–IX–2) is usually shown by a curve to the left and for Ī to the right and left-(e. g. See :  *BH*-VIII-2 (reverse) in *Śrī*). The medial *U* is shown usually in three ways. For instance, in *Mu* or *Su* it is the elongation of the right vertical proceeding downwards. , (See : *BH*-I, 13, II-14, VI-4, XV-7, 8, etc.) ; and in *Ku*,  , a small curve or a line to the left at the bottom indicates the sign (See : *BH*-XX-7, 8, 9, 10). In some cases the bottom line turns to the right also

(See : *BH*-I-1, XXVII-11 etc.). And in *Gu* and *Śu*,—  ,

 there is a long curve open to the right going up. (See : *BH*-I-7, XVII-14 etc.). The medial *E* is indicated by a small slanting stroke leaning to the left at the top of the letter— (*De*) (See : *BH*-X-8, 10, 11, 14 etc.) ; while two such strokes are meant for the medial *Ai*-  (*Tai*) (See : *BH*-XXI-6). The medial sign for *O* is denoted by two small lines at the top of the letter, one turning to the left and the other to the right- (See : *BH*-XXII-15, XXIV-5, etc.). The *Anusvāra* is a simple dot at the top ; and the Visarga is represented by two side dots. The medial *Ri* has almost the same sign as it is up till now; e.g. *Kri*-  (*BH*-V-11, 12, 13, etc.) ; and the subscript *Ra* is either a tail or a curve attached to the bottom of the letter to the left  , (See : *Kra BH*-I-14, 15, II-3, 4, 5, etc.) ; while *R* before a letter is just a small vertical line at the top of the letter (See : *Rva*  *BH*-VII-9). As pointed out above, there is hardly any diagression from the usual style as found in the inscriptions.

The mode of writing is always from left to right, but there are a few names e. g. Samudragupta, Chandra, Kācha etc. which run from top to bottom. Chinese and Japanese are written from top to bottom, which are pictographs. It was suggested by some scholars that this mode of writing was derived from Chinese style.[1] But the coins of the Guptas were perfectly Indianised and we need not go afield to find its source. It is a simple device to fill up the space artistically.

1. See : Altekar, *BH* -Introduction, p. XLVIII.

Abbreviations used :

BH—Catalogue of the Gupta Gold Coins in the Bayana Hoard–1954, (Altekar, A S.);

BMC–A Catalogue of the Indian Coins in the British Museum–Gupta Dynasties–1914, (Allan, Joh);

CII–Corpus Inscriptionum Indicarum ;

EI–Epigraphia Indica ;

IMC–Catalogue of the Coins of the Indian Museum, Calcutta, Vol. I, 1904 (Smith, V.A.);

JNSI–Journal of Numismatic Society of India ;

JRAS–Journal of Royal Asiatic Society ;

Prā–Lip.–Prāchīnalipimālā (Ojha, G. H.)

REG–Rock Edict of Girnar of Aśoka.

ON ANCIENT INDIAN COIN-LEGENDS

JAI PRAKASH

Attempts have been made to press the antiquity of coinage in ancient India as far back as the Vedic period.[1] But according to A. S. Altekar, the possibility of its origin lies around c. 800 B.C.[2] Whatsoever be the antiquity of Indian coinage there is paucity of literary references concerning inscribed coinage in ancient India. And this paucity is due perhaps to the fact that the early Indian coinage was uninscribed.

V. S. Agrawala enumerates the four meanings of *Nishka* according to *Amarakosha*, the last of which was "a *dināra*, i.e., the gold Denarius coin as was current in the Gupta period, to which frequent reference is also made in the inscriptions. The *Kāśikā* refers to the same as आहतं रूपमस्य रूप्यो दीनारः on Pāṇini V. 2. 10 (रूपादाहृतप्रशंसयोर्यप्), which was of course a contemporary illustration from Gupta numismatics, rather from Pāṇinian times."[3]

Āhataṁ rūpaṁ can be taken to denote coins impressed with human, animal or some other representations. In the case of *Dināra*, it is a later expression used to suit the Gupta coinage, which contained inscriptions. But *āhataṁ rūpaṁ* originally stood for the punch-marks, popular on the face of the Pāṇinian coinage. In the Gupta period the same old phrase was employed to denote the royal and divine figures, together with their legends etc. The same is true about the *āhatasuvarṇa* coins, referred to in the *Mahābhārata*[4], as these Mbh. *Suvarṇa*-pieces were, too, *āhata* i.e., punched or impressed.

Development of the Coin Legends

An observation of the coin legends of ancient India shows two different processes of its development. In the first category come the coin-legends of the Śakas, the Pahlavas, the Kushāṇas, and the Guptas, or the legends of the strong monarchies, which followed the Indo-Greek rule, in

1. Bhandarkar, D. R., *Lectures on Ancient Indian Numismatics*, pp. 63 ff.
2. Altekar, A. S., *JNSI*, XV, pt. I, p. 26.
3. Agrawala, V. S., *JNSI*, XVIII, pt. II, p. 144.
4. *Mahābhārata*, *Sabhāparva*, 46. 6.

their respective order. The second consists of the coin legends of the city states, republican tribes, and the local dynasties. The only imperial dynasty to be classed in this group is that of the Sātavāhanas.

Some metallic pieces discovered from Indus excavations were taken by Altekar to be coins. One of these twelve metallic pieces bears a short inscription which indicates its being imported from Assyria,[1] which, if it be a coin at all, shows that the Indus people knew about inscribed money. But as none of the other pieces contain anything in the Indus script, it becomes clear that possibly they had no knowledge of coining money with legends on them. This, taken together with two other pieces which are not in conformity with the Indus weight system, makes their Indus origin character doubtful.

K. P. Jayaswal tried to read the names of some of the Maurya rulers on the punch marked coins. And if his hypothesis be accepted, the punch-marked pieces will form the earliest inscribed coin series of India. He says : "A number of cast copper coins and some silver punch-marked coins, both bearing unmistakable Maurya marks, have initial letters. By the process of elimination they should belong to the early Mauryas, namely, Aśoka, Bindusāra, and Chandragupta, the initials are *A*, *Bi*, and *Ma*'[2]

According to him *A* is found on the reverse of punch-marked silver coins dug out and recovered from the Maurya level at Pataliputra from Ghoroghat (Bhagalpur) in a group of 84 coins found buried in a stūpa, which bears definite Maurya symbols. "The number 84 would evidently connect the stūpa with Aśoka."[3]

But if the stūpa belonged to Aśoka, how is it that only one out of the 84 coins is initialled ? Not only this; both of the pieces containing the symbol like the Brāhmī letter *A*, from Ghoroghat (Bhagalpur) do not contain any other symbol, which are found on the punch-marked coins in so large numbers. And this latter may show that they are not punch-marked coins at all. The real purpose of this *A*-like symbol thus becomes doubtful, and hence the pieces bearing it cannot be associated with Aśoka.

1. Altekar, A.S., *JNSI*, XV, pt. I, p. 14.
2. Jayaswal, K.P., *Proceedings of the Annual Meeting of the Numismatic Society of India*, 1935, p. 11.
3. Ibid.

"The letter *Bi* is found on a lead coin of the Maurya series which is now at the Patna Museum and which was discovered on the occasion of the last annual meeting of the Society[1] at Bhita. Besides, it is found on several other copper cast and punch-marked coins in addition to its existence on Mauryan pottery and arms[2]". But the obverse of the said Bhita coin, as it appears from the reproduction provided by Jayaswal[3], does not seem to contain an initial *Bi* in Brāhmī. It so appears, that the coin contains a line representation of Śiva liṅga, perhaps the earliest on coins, supported by a raised snake-hood, the latter part of whose body forms a coil. Same might be true to other *Bi* like symbols, found on coins, pottery and arms.

Further, according to Jayaswal the letter *Ma* is found in Kharoshṭhī and Brāhmī on the Persian Sigloi and on eastern coins respectively. The Brāhmī form has been generally taken to be the taurine symbol, but its occurence on the Pataliputra coins in a reverse order (as in the Bhaṭṭiprolu inscription) and the occurence of *Ma* in both Kharoshṭhī and Brāhmī would make us inclined to take it as a letter. The letter *Ma* on the Maurya series of coins probably originally stood for Muriya or meaning the first Maurya, or for Magadha. The earliest Maurya symbol which is found by itself (along with an eye figure) on a seal in Pataliputra pottery is the moon on hill which seems to stand for Chandragupta or Chandra Vaṁśa. That it stands for the former would be gathered from the story recorded by Justin about Chandragupta that he was placed by an elephant on its back and was licked by a lion. A series of Taxila coins (*CAI*, III) has the symbol in front of the open mouth of the lion with its protruding tongue and the reverse has the moon-on-hill on the back of an elephant (e.g. *CAI*, III. 2), and the letter *Ma* is also to be found on those coins.[4]

But the coins of the two references given by Jayaswal do not contain any *Ma*-like symbol. The symbol in front of the open mouth of the lion is really a hill symbol surmounted by a crescent.[5] And above the lion is a svastika

1. 1934.
2. *Proceedings of the Annual Meeting of the N.S.I., 1935*, p. 12.
3. Ibid., Cf. pl.
4. Ibid., pp. 12–13.
5. The said symbol is very clear on Cunningham, *CAI*, pl. III. 2, whereas on coin no. 1 of the same plate only its traces are found.

symbol. Hence, it becomes clear that none of the early Mauryas issued coins with their initials. If at all they ever intended to strike such currency they must have engraved their full names. Because, it cannot be said that the early Mauryas were ignorant of inscribed money, for Chandragupta Maurya is known to have been in contact with both, Alexander and Seleucus Nicator. Bindusāra too, had diplomatic relations with Antiochus I, the second Seleucid king of Syria.[1] And the relations of Aśoka with the then west Asian monarchs is testified by his epigraphs.[2] And the Greeks had an early tradition of inscribed money.

Let us now examine the coins, which according to Jayaswal contain the names of the later Maurya rulers. He says, "we have.....certain signed coins which bear the names of Maurya kings. They are all of the later Mauryas, that is from Dasaratha downwards. Dasaratha was, as we all know, the grandson and immediate successor of Asoka. There is a die struck copper coin obtained at Taxila by Cunningham which is reproduced by him in his *CAI.* Plate (1), as c in No. 5, which has a legend in Kharoshṭhī, a fact not noticed before..... The legend reads *Dasara[tha]sa* (of Dasaratha). Both the obverse and the reverse have the moon-on-hill symbol.... The reading of the name is confirmed by two leading authorities on Kharoṣṭhī whom I have consulted, Prof. F. W. Thomas and Dr. Sten Konow....."[3] But a close observation of the reproduction of the said coin contains neither the moon-on-hill symbol nor the said legend *Dasarathasa.*[4] It contains a multiplicity of symbols among which are an elephant, bow fitted with arrow pointing upwards, sun, wheel taurine etc.[5] The other coins which Jayaswal assigns to Deva dharman,[6] Sata dharman[7] and Bṛihadaśva[8] (or Bṛihaspatimitra according to him) are really the coins of local rulers, to which their style etc. bear a strong testimony, and hence will be discussed elsewhere.

Recently Swami Sankaranand has attempted to decipher legends on punch-marked coins.[9] It is argued

1. Raychaudhari, H. C., *PHAI.* (6th edn.), pp. 298 ff.
2. Sircar, D.C., *Select Inscriptions*, No. 18, R.E. XIII, line 9, p. 37; cf. also No. 7, R.E. II, line 3, p. 18.
3. Jayaswal, K. P., op. cit., p. 8.
4. Cunningham, *Coins of Ancient India*, pl. I. No. 5.
5. Ibid.
6. Ibid., pl. V. 10.
7. Ibid., pl. IX. 5.
8. Jayaswal, pp. 9-10.
9. Swami Sankaranand, *JNSI*, XII, pt. I, pp. 11 ff.

that "*Visuddhi-magga* records the tradition that the experts in the past could state by examining the coins as to where and by whom they were issued. It is not therefore improbable that the symbols on punch-marked coins may have had phonetic values. This probability is further strengthened by the presence of some Brāhmī characters among the punch-marked symbols."[1] And with all these probabilities, Swami Sankaranand adopting the *Tāntrika Bijamantra* system, makes the coin symbols, a type of pictographs, having a definite sound value. But this view is highly improbable and anachronistic in method.

Before coming to the coinage of the Indo-Greeks we must refer to the Persian Sigloi, said to have been issued by the Achaemenids for circulation in their Indian dependencies. The Persians had an established system of cuneiform writing in which most of their inscriptions are found, but this script was not used on their Siglois, a fact which shows they had no inscribed numismatic tradition like the Greeks. The early Siglois contain only some punch-marks like the Indian punch marked coinage. They do not contain the initial "letter *Ma* ...in Kharoshṭhī and Brāhmī," as supposed by Jayaswal.[2] The fact of the early Persian coinage not being inscribed shows that perhaps the later inscribed coinage of Persia was a new introduction, possibly inspired by the Greek numismatic art.

The Indo Greeks were the first to establish inscribed numismatic tradition in India. They knew the art of coining money with legends on them, before their appearance on the Indian soil. The kings of the Indo Greek dynasties in the north-west of India issued coins with the same old Greek numismatic tradition as their background.

Among the earliest inscribed coins connected with India, the issues of Alexander the Great and Sophytes, an Indian prince, are important. The only coin of Alexander, which comes from Khullum in Bukhārā, shows a horseman following two retreating elephant riders.[3] This coin contains a monogram, a combination of Greek letters *B* and *A*, which is taken to stand for *Basileus Alexandroy*,[4] and most probably it was issued to commemorate the victory of the Macedonian invader against Porus, his contemporary king of Punjab.

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1. Ibid., p. 11.
2. Jayaswal, op. cit., p. 12.
3. *Cambridge History of India*, I, pl. I. 16.
4. Ibid., p. 349.

The coins of Sophytes contain merely his name *Sophytou* in Greek script.[1] All these Indian issues show the simplicity of the earliest inscribed coin series.

Indo-Greek Coin Legends

Coins of the Indo-Greek kings have a definite place of importance in the history of Indian numismatics. They use either one or more royal epithets before their names on their coin-issues. And hence, from the Indo-Greeks starts an important stage in the development of coin legends in ancient India. They can be classified in the following heads: (i) Regular issues, (ii) Commemorative medals, and (iii) Joint issues.

REGULAR ISSUES: GREEK LEGENDS

The regular issues again are divisible, into (a) monolingual and monoscriptual, and (b) bilingual and biscriptual coins.

The rulers who issued only monolingual and monoscriptual coins are: Diodotus I, Diodotus II, Euthydemus I, Demetrius I, Euthydemus II, Antimachus I, Plato, Heliocles and Eucratides II. The striking of such and only such coins by the first six rulers of this list shows that possibly they had nothing to do with India proper.

The remaining Indo-Greek rulers issued mostly bilingual coins. The Qunduz hoard has, however, brought to light coins with only Greek language and script, even of such later rulers who were formerly known to have issued only bilingual issues.[2] This clearly shows that a great majority of the Indo-Greek kings issued coins (i) containing Greek legends in Greek script and (ii) coins containing Greek legends in Greek script on obverse and either with or without an exact rendering of the obverse legend in an Indian language and script on the reverse.

The obverse legends of the regular issues of the Indo-Greeks can be divided into four groups on the basis of their use of one, two, three, or even four-word regal epithets. The first five rulers of the said list have used only one regal title i.e. *Basileus*, on their coins. The only exception in this class of kings is Diodotus I, who is the first Indo-

1. Ibid., p. 348.
2. Bivar, A. D. H., *The Bactrian Treasure of Qunduz*, Numismatic Notes and Monographs, No. 3, p. 4.

Greek to use regal epithets also on his coins. And though, he uses two different titles i. e., *Basileus* and *Soter*,[1] none of them are found combined together on his known coin-types. The coin-legends of the above mentioned kings show that the Greek title *Basileus*, was taken by the Indo-Greeks to denote their regal position. *Basileus* was the most popular of all the regal titles adopted by the Indo-Greeks and was perhaps considered sufficient to indicate the power, prestige and the independence of the king. It was also retained in most of the combined coin legends. The most popular combination was that of *Basileus Soteros*. Long after Diodotus I, the use of *Soter* was revived by Menander[2], and from this time onward, it was used by most of the Indo-Greek kings. In between Diodotus I and Menander, it was used as a title of the former only on the commemorative coins of Agathocles.

The double epithet combinations provide the largest number of new titles, as adopted by the kings of this group. Among these new introductions are *Theos*, *Aniketos*, *Dikaios*, *Nikephoros*, *Niketoros*, *Megaloi*. *Epiphanos*, *Euergetos*, and *Autocratoros*.

A combination of three titles can also be noticed on the coins of the Indo-Greek kings, e.g. Polyxenus. The kings, however, have rarely followed the same order of arrangement even though all the three titles are the same. Here, *Philopater* occurs as a new title, used only by Apollodotus.

Apollodotus again is the only ruler who adopts a combination of four regal epithets. No doubt he was one of the most important rulers in the Indo-Greek series after Menander, and his political importance is betrayed even by his coin-legends.

COMMEMORATIVE MEDALS

Commemorative medals, issued by some of the Indo-Greek rulers, are an important feature of their coinage.

1. The *Diodotoi Soteros*-bearing coin, which is the only evidence to show the adoption of *Soter* title by Diodotus I in his lifetime, is, however, questioned by G. Macdonald (*CHI*, I. p. 398), who makes it a commemorative medal, struck by Demetrius I (*CHI*, I. pp. 305-306; pl. III, 9). But A. K. Narain (*The Coin-types of the Indo-Greek Kings*, p. 3.) lists the coin concerned with the regular issues of Diodotus I.
2. *PMC*, III, 481 etc.

These medals chiefly are of four types. The coins issued (i) in honour of some important historical personages, (ii) in honour of some relations, (iii) to commemorate some important event or so of the reign of the issuing authority, and (iv) such issues of an unknown character.

Five Indo-Greek kings in all, are known to have issued this type of coins. Antimachus I was the ruler who started striking such special issues. He was followed by Agathocles, as he commemorated Diodotus I, and Euthedemus I, kings already remembered by Antimachus I on his money, of course in addition to other kings. Agathocles also retained the *Basileontes* epithet, used by Antimachus I. Both of them used this title only on the reverse of their commemorative medals, and not on their regular issues. But this practice was not followed by the remaining kings of this series. Their personal epithets are used on regular as well as commemorative issues.

The so-called commemorative medal issued by Menander is of an unknown character, for it has no legend or any such other sign, on the basis of which its real nature may be ascertained.

Eucratides is the only king to have commemorated his relations. The obverse of one of his types records the names and busts of Heliocles and Laodice, who might have been either his parents or his son and daughter-in-law.

The twenty stater piece of Eucratides and the outsize coins of Amyntas were intended as special medallions to commemorate some resounding military success.[1] This characteristic of these coins is betrayed even by the regal titles adopted by the two kings. Eucratides calls himself *Megas* or 'the great' on these pieces. And Amyntas styles himself as *Nikator* or 'the conqueror.' These titles bear testimony to some otherwise unknown successful martial exploits of their adopters.

JOINT ISSUES

The joint issues of the Indo-Greeks are roughly of two types, namely, (i) issued by regents, and (ii) those issued in association with a subordinate ruler.

The striking of joint issues seems to have originated out of necessity. The issues of Strato I and Agathocleia

1. Bivar, A. D. H., *The Bactrian Treasure of Qunduz*, pp. 5-6.

show that the latter probably acted and ruled as regent during the former's minority. Coins bearing the bust, name and titles of the Queen Mother Agathocleia show that she was an absolute regent. Her absolute regency for some time is indicated by the second type of coin legend and other details of the piece. But it appears that she had started initiating her son in statecraft by this time, as is indicated by the appearance of the name of Strato on reverse. The issues of this type are rare and "must have been followed by an intermediate period, when coins bearing the conjugate busts of Agathocleia and the boy Strato and the names of both were issued[1]". Issues of this series and their legends indicate that Agathocleia was no more a 'Queen', though the appearance of her bust and name on the coins show, that she still had a strong voice in the state management. They also point out "that Strato was approaching an age when he was impatient to assume complete power and authority[2]" but was not yet successful in his designs. But he became successful probably soon after, as the rarity of those coins indicates.[3]

Of the joint issues struck probably in collaboration with an associate, first in the series would be that which bears the name of Lysias on the obverse and that of Antialcidas in Kharoshṭhī provided they are not taken as a "mule". Lysias adopts his usual title here i. e., *Aniketos* (invincible), whereas on the reverse Antialcidas is called *jayadharasa* (victorious), a title found even on his independent issues. If the authority of this coin be accepted[4], then Antialcidas must have been an associate of Lysias, sometime in his early life, which, however, is testified only by the appearance of his name on the reverse of this piece.

The next, that of Strato I and Strato II, shows that the former had grown considerably old and as a result required the services of an assistant in the government. And finally his choice fell on his son Strato II, who, however, is known only from these coins, and hence it appears that he never succeeded his predecessor as a sovereign ruler himself. Their mutual relationship is mentioned on the reverse of these coins.

1. Narain, A. K., *The Indo-Greeks*, p. 110.
2. Ibid.
3. Ibid., p. 111.
4. "This coin-type is most likely a mule". See Narain, A. K., *The Coin-types of the Indo-Greek Kings*, p. 25, n. 2.

The appearance of the name of Calliope on the obverse and reverse of the coins, together with the name of Hermaeus, as even their busts, indicates that Hermaeus raised Calliope, his wife, to an almost equal status in administration. However, even if Calliope was 'a princess in her own right', there is no doubt that she owed her regal position and status to Hermaeus. This explains, why no regal title whatsoever is attached to her name on the coin legends.

The joint issue struck by Hermaeus with Kujula Kasa, a Kushāṇa chief, shows that in his last days he required the services of an assistant who, however, was not a Greek himself. And therefore, naturally Hermaeus must have been guided by political reasons to appoint an Yüeh-chi chief, as his assistant in administration. The obverse of these coins according to Cunningham reads ΒΑΣΙΛΕΩΣ ΣΤΗΡΟΣ ΣΥ ΕΡΜΑΙΟΥ. He translated the ΣΥ of this legend as 'Kinsmen',[1] for which no reasons were supplied. Even if his view be accepted the said obverse legend fails to clarify the relationship between Hermaeus and the other king (Kujula Kasa). The reverse also does not point out any relationship.

The Greeks, being faithful to their original traditions, adopted such titles, as were popular in the land of their origin, for the imposition of their regal authority. All the titles taken together show the very personal and ambitious traits of their users. On the one hand we note titles which signify their greatness, political power and military strength, on the other those that signify their religious leanings. Some of the titles also tend to indicate the divinity of the king.

All the titles of the said types and nature are Greek. The like of such epithets were not popular in India before the Greek invasion of the country. Some scholars, however, have found an exception to it in the use of *Megas* by the Bactrian Greeks. Seltman states that Eucratides "was the first Greek king to describe himself as 'the Great' upon a coin," but this was only because ΒΑΣΙΛΕΩΣ ΜΕΓΑΟΥ "was the translation of *mahārājas i*, and was therefore no mere piece of bombast."[2] But this observation is not a plausible one, because *mahārāja* as a regal title became popular in ancient India only in imitation of the Greeks. None of the early Indian kings are yet known to have used it either in their official

1. *NC*, 1892, p. 46.
2. Seltman, C., *Greek Coins* (2nd edn.), p. 225.

documents or in contemporary writings. Aśoka, in his inscriptions, uses only *rājā*.[1]

Besnagar inscription[2] refers to the Greek king Antialcidas as *mahārāja* whereas the Hindu king Bhāgabhadra is styled only as *rañño*. This distinction of the use of regal titles in the Besanagar epigraph clearly shows that Eucratides was translating a Greek title in Prakrit as *maharajasa*, and not otherwise. *Maharajasa*, like many other titles, was popularised in India by the Indo-Greeks, and other foreigners who followed them.[3]

Prākṛit Legends

The Indian legends on the coins of the Indo-Greeks too, like the Greek legends, can be classified in four distinct groups, on the basis of epithet-combinations. Monarchs using one-word title on the reverse (or obverse) of their issues are only a few. And the main titles of this group are only *rajane* and *maharajasa*.

Among the combination-epithets, *maharajasa tratarasa* was naturally the most popular. But *maharajasa apaḍihatasa*, *maharajasa dhramikasa*, and *maharajasa jayadharasa* were also quite popular combinations.

Among the three-word epithets, interesting combinations of the titles already known, with the exception of *pracachhasa*, may be noted.

A combination of four-word titles in Kharoshṭhī is found only on a coin-type of Hippostratus. The titles combined together in this legend were popular in various ways even before Hippostratus.

The commemorative medals do not contain inscriptions in Kharoshṭhī. But only when the *kavishiye nagara devatā* type of Eucratides[4] is accepted as a commemorative medal can its Kharoshṭhī legend be explained with certainty. It cannot be classed under the category of his regular issues. The reverse legend shows that the coin was issued in honour of the city deity of Kapiśā Katare takes it to "indicate the deification of the Sovereign Authority of the City State of Kapiśā."[5] But it does not seem

1. Sircar, D. C., *Select Inscriptions*, No. 15, p. 31 etc.
2. Ibid., No. 2, p. 91.
3. Ibid., p. 90, n. 4.
4. *PMC*, III, 131 ; *NC*, 1947, p. 30 ; Narain, A. K., *The Indo-Greeks*, pl. IV. 8, 9.
5. Katare, S. L., *JNSI*, XIII, pt. I, p. 43.

plausible. Probably the conquest of this ancient city was a dream of Eucratides. And after having captured it, he issued coins of this type in honour of the deity (Zeus[1] ? or female deity[2]), to whose favour its conquest was attributed. Hence its commemorative character. This suggestion is supported by the miniature *Chaitya* figure on left, and the elephant paying obeisance to the Greek deity of the victor. The *Chaitya* and the elephant might be the original guardian deities of the city, who were finally made subordinate to the Greek divinity. The reverse legend, thus, introduced the new guardian deity of the city to its subjects. This indicates the commemorative character of the coin, and makes the view of Katare untenable.

The reverse legends of the joint issues of the Indo-Greeks contain titles only for the anointed king and not for the subordinate or the associate ruler. This is made clear by the reverse legends on the coins of Strato I and Agathocleia, and Hermaeus and Kalliope; Lysias-Antialcidas coin is an exception but its character is correctly doubted[3] by scholars. Strato I and Strato II coin is unique in the sense it contains the relationship between the two rulers.

The Indo-Greek kings took Greek regal denominations to impress their imposing royal glories. But later, with a view, perhaps, to familiarise themselves more with their Indian subjects, they translated their titles in Prākṛit, selecting appropriate equivalents.

The view that the adoption of *dhramika* by Menander "in the Kharoshṭhī legend, may be connected with his adoption of the Buddhist faith"[4] is not correct. Because, had this title really something to do with Menander's Buddhist faith, it would not have been omitted, in an inscription, recording the burial of the corporeal relics of the Buddha, in the reign of Menander.[5] *Dhramika* is not in the Hindu tradition of regal epithets, and therefore appears to be a mere Indian variant, denoting a sort of righteous attitude of the king in justice and administration.

Though the ancient Indian political philosophers had already made *praja-rakshana* i.e., protection, a duty of the

1. *PMG*, p. 26.
2. *The Indo-Greeks*, p. 63.
3. Narain, A.K., *The Coin-types of the Indo-Greek Kings*, p. 25.
4. Narain, A. K., *The Indo-Greeks*, p. 100.
5. Sircar, D.C., *Select Inscriptions*, No 14, p. 102 ff.

king,[1] yet no Hindu king before the Indo-Greeks is styled as a protector. But the Indo-Greeks called themselves *soter* (protector or *trātā*). The credit of popularising this epithet, too, in India goes to the Indo-Greeks. In the Besnagar inscription the mention of *trātārasa* as an adjective of Bhāgabhadra, is perhaps due to the person, probably a Greek, who prepared the draft of the record.[2]

Another important Prākṛit epithet which survived even in much later times is *rajatiraja*. It was used in the Indo-Greek series only by Eucratides. But later it found favour with the rulers of almost every important dynasty. Its earliest adoption by an Indian is found on the coins of the Audumbara king Mahādeva[3], which record on their obverse *rajarañasa* (skt *rājarājñaḥ*), and as *rajaraja* on the reverse. Thus introduced by Eucratides, continued and popularised by the Śakas and Pahlavas, it finally came to be *rājādhirāja* of later Hindu kings.

Other Prākṛit titles which are equally outlandish, failed to find favour with later Hindu dynasties.

Style

Stylistic division and differences of the coin-legends of the Indo Greeks are based on their main types. The coin-legends of their regular issues are simple. They contain one, two or three regal epithets, attached before the name of the ruler concerned, and are mostly in genitive. Indian language legends of these coins are also of the same type, inasmuch as they contain an exact translation of the obverse legend. The only differences that are found in this case are on some of the coin types of Strato I, Apollodotus and Peucolaus. The details of these legends are as follows:

No.	King	ref.	obv.	rev.
1.	Strato I	*NC*, 1948. Pl. VIII. 5,6; IX. 1, 6.	ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΚΑΙ ΣΤΡΑΤΩΝΟΣ	*Maharajasa tratarasa dharmikasa Stratasa*
2.	Apollodotus	*PMC*, IV. 276; V. 353.	ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΚΑΙ ΦΙΛΟΠΑΤΟΡΟΣ ΑΠΟΛΛΟΔΟΤΟΥ	*Maharajasa tratarasa Apaladatasa*

1. *Śāntiparva*, 68, 1-4 ; *Manusmṛiti*, VII, 144.
2. Sircar, D.C., *Select Inscriptions*, p. 91. n. 2.
3. Allan, *BMC, AI*, p. Lxxxv, pl. XIV. 16.

No.	King	ref.	obv.	rev.
	Apollodotus	*BMC*, X. 1.	ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΣΩΤΗΡΟΣ ΚΑΙ ΦΙΛΟΠΑΤΟΡΟΣ ΑΠΟΛΛΟΔΟΤΟΥ	*Maharajasa tratarasa Apaladatasa*
3.	Peucolaus	*NC*, 1923. Pl. XV. 4. *PMC*, VII. 642.	ΒΑΣΙΛΕΩΣ ΔΙΚΑΙΟΥ ΚΑΙ ΣΩΤΗΡΟΣ ΠΕΥΚΟΛΑΟΥ	*Maharajasa dhramikasa tratarasa Piukulasa*

The obverse legends of the coins mentioned above are different from the rest of the regular issues of the Indo-Greeks, in as much as they contain an additional word 'Kai' (and). It is curious to note, however, that this addition on the obverse legend did not affect the Kharoshṭhī side.

Another stylistic difference, though only one legend of its type is found on some coin-types of Apollodotus, is:

Obv. ΒΑΣΙΛΕΩΣ ΑΠΟΛΛΟΔΟΤΟΥ ΣΩΤΗΡΟΣ.

Rev. *Maharajasa tratarasa Apaladatasa*.[1]

It is the only legend, representative of its type in the whole of the Indo-Greek series, wherein we have the name of the ruler mentioned in between two regal epithets. Here as well, the obverse style does not correspond with the reverse.

Stylistically, Pantaleon is the only king to use his name as ΠΑΝΤΑΛΕΩΝΤΟΣ on his coins.[2]

The nature of commemorative medals appears to be introductory. They commemorate some important persons or events, and were meant to introduce those important persons etc. to the people among whom they were put in circulation.

The reverse legends of these coins are: (1) Antimachus: ΒΑΣΙΛΕΩΝΤΟΣ ΤΙΙΕΟS ΑΝΤΙΜΑΧΟΥ (2) Agathocles: ΒΑΣΙΛΕΩΝΤΟΣ ΔΙΚΑΙΟΥ ΑΓΑΘΟΚΛΕΩΣ. Both of these legends in this form and combination are not found on the regular issues of these kings a fact which points out their stylistic difference.

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1. *PMC*, IV. 231, 236, 263, 307; V. 322.
2. *BMC*, III. 8; XXX. 4; *PMC*, II. 35.

But the commemorative coins of Eucratides, in which he commemorates Heliocles and Laodice[1] are not of introductory character, because, the subjects of Eucratides perhaps knew fully well as to who these Heleocles and Laodice were. The commemorated persons might have been living before the people among whom these coins were current. The reverse legend of these pieces is in nominative unlike that of the regular coins of Eucratides. It is : ΒΑΣΙΛΕΥΣ ΜΕΓΑΣ ΕΥΚΡΑΤΙΔΗΣ.

The victory medallions of Eucratides[2] and Amyntas[3], which are a type of the commemorative series, have nothing in common with the legends of the other medals. They contain the legends of their kings, which are found on their regular issues, in genitive. They are: ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΕΥΚΡΑΤΙΔΟΥ and ΒΑΣΙΛΕΩΣ ΝΙΚΑΤΟΡΟΣ ΑΜΥΝΤΟΥ.

These pieces, which were the issuers' highly personal coins, were perhaps meant to publicise some noteworthy event of their reigns, and had nothing to do with any other king dead or alive. Their unusual size and weights are remarkable.

In some respects, the legends of the joint issues of the Indo-Greeks indicate a different style. The legends of the pieces of Agathocleia and Strato, which contain the names and titles of both, on the obverse and the reverse of the coins, are in the style of the regular Indo-Greek issues, e.g. ΒΑΣΙΛΙΣΣΗΣ ΘΕΟΤΡΟΠΟΥ ΑΓΑΘΟΚΛΕΙΑΣ.[4]

The rest of their joint issue legends are different only in the respect that they contain the name of the regent i.e. Agathocleia, either on obverse or on both sides of the coin,[5] though the regal titles here are not attached before the name of the Queen Mother. Similar is the case in the coins of Hermaeus which contain the names of the king and Calliope.[6] Calliope is not given any regal titles on these coins though her name appears in the legends on both sides of the coin.

1. *PMC*, IX. iv.
2. *Revue Numismatique*, 1867, pl. XII.
3. *JNSI*, 1953, pl. IX. 1-2.
4. *PMC*, V 370; *PMC*, IX, vii; *NC*, 1947, pl. I, 6.
5. *PMC*, IX, vi; *NC*, 1950, p. 212.
6. *PMC*, IX, 693.

But the other joint issues of Strato I and Strato II[1] are different from the rest of the coins of this group in some respect as they mention their relationship:

1. Strato I.

ΒΑΣΙΛΕΥ ΣΤΗΡC ΣΤΡΑΤΟΝ.....[2]

Maharajasa tratarasa stratasa potrasa chasa priyapita stratasa.

General Observations

The style of the reverse legend follows the Greek pattern. There is, however, an irregularity presented by Strato I and Strato II coin which mentions their relationship and the love and affection of one for the other. The Śakas and Pahlavas, however, mention their relationships on the coins more frequently.

The Indian legends on the reverse are generally in Kharoshṭhī but in the case of two kings in Brāhmī. The fact of Brāhmī being not popular with the Indo-Greeks, supports the view that Kharoshṭhī was most widely prevalent in the north-west of India[3], to which area mainly was the success of the Indo-Greeks confined.

The titles of the Indo-Greeks were translated almost literally on the reverse. The bilingual joint issues are an exception to it. Other exceptions, which are collected from the regular Indo-Greek coinage, are mainly three. The first of these, is found on the coins of the kings who use Brāhmī script on their coins. The coins of Pantaleon[4] and Agathocles[5] translate the Greek title *Basileus* as *rajane*, whereas, on all other specimens of the bilingual coins of the remaining kings, it is translated as *maharajasa*. Secondly, a coin type of Eucratides contains the reverse title *rajatirajasa*,[6] whose Greek equivalent is not found on the coins of Eucratides. But on the coins of the Śakas and Pahlavas it was translated in Greek as *Basileus Basileon*. Thirdly, some coins of Apollodotus contain *maharajasa tratarasa*, with the name of the king on their reverse. But the obverse of such coin-types sometimes styles him as simply

1. According to A. K. Narain, these coins were issued in the 2nd period of Strato I's reign. See *The Indo Greeks*, p. 146.
2. *PMC*, VIII. 643.
3. Pandey, R.B., *Indian Palaeography*, (2nd edn.), p. 56.
4. *PMC*, II. 35.
5. *PMC*, II. 45; *BMC*, IV. 9.
6. *BMC*, XXX. 12; *IMC*, I. 10.

Basileus Apollodotus[1], possibly as an equivalent of the said Prākṛit legend. Such translation peculiarites, curiously enough, are often repeated on the coins of Apollodotus, for on some specimens, the obverse legend is *Basileus Soteros kai Philopateros Apollodotoy*,[2] or else *Basileus Megas Soteros kai Philopateros Apollodoty*.[3] But here too, the reverse legend is only *maharajasa tratarasa apaladatasa*.[4] This lack of a complete translation of the Greek legend on the reverse is interesting.

An analysis of the legends shows that in the earlier stages of Greek coinage the name of the issuing authority was considered necessary and sufficient. Later the regal titles were introduced as adjectives prefixed to the name of the ruler which occurred at the end of the complete legend. The obverse and the reverse of Indo-Greek coins bear a clear testimony to it. Exceptions to this are however found on some coins (of Strato I and Apollodotus).

On their commemorative medals, they adopted a different pattern, and tried to give not only the names, titles and busts, but also the favourite deity of the king being commemorated by them.

Their joint issues follow the pattern of their regular coinage. In addition, they contain the names of a regent, assistant or an associate ruler, either on one or on both sides of the coin. But unlike the similar coins of later foreigners, the imperial titles are not extended to the subordinate rulers. Some coins of Strato I and Agathocleia bear an exception to it, especially those pieces on which the Queen Mother styles herself as *Basilisses Theotropoi*.

The Indo-Greeks, unlike the Kushāṇas, never gave the names of their deities on coins, probably because they knew their favourite deities fully well. The *kārishiya nagara devatā* type even does not contain the name of the deity. Because the name as well as the deity was quite familiar to Eucratides, and hence this curious reverse legend. This legend only shows the installation of a Greek deity in an altogether new capacity.

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1. *NC*, 1947, p. 143.
2. *PMC*, IV. 276 ; V. 353.
3. *BMC*, X. 1.
4. *PMC*, III. 131 ; *NC*, 1947, p. 30 ; *The Indo-Greeks*, pl. VI. 8, 9.

Both on the obverse and the reverse genitive was the most popular case-ending employed by the rulers t6 exhibit their royal authority, possession and power in association with epithets.

The coin-legends of the Indo-Greeks influenced the pattern of legends on the coins of their immediate successors.[1]

1. This paper covers the development of Indian Coin Legends only up to the Indo-Greeks. We propose to follow it up in the coming issues of the *Journal*.

METROLOGICAL STUDY OF THE GOLD COINS OF EARLY INDIA

S. K. MAITY

Gold, proverbially the most coveted of all metals, has in the pure state a colour which cannot be imitated by any alloy or combination of other metals. It is untarnishable and remains bright and free from surface films of oxide at all temperatures. For this reason, it was called 'noble metal' by the alchemists of the Middle Ages in Europe.

Pure gold is very soft and malleable; for increasing hardness it is generally alloyed with silver and copper. We have recently examined three types of gold coins: from the British Museum, London; Indian Museum, Calcutta; and Singhi Museum, South Calcutta. Some are yellowish in colour, and apparently alloyed with 15 to 35 per cent of silver. Others are reddish and are alloyed with copper. The last type is blackish in complexion which means it is heavily alloyed with silver and copper in disproportionate degrees. A few of the last type are from the Kushāṇa-Gupta period and quite a large number of them belongs to the medieval Hindu period.

The earlier gold coins are much better in quality and quantity;[1] the later Hindu gold coins are poor in both the respects. But from the point of view of weight also, the gold coin varies to a remarkable degree: from (i) 242 grains (16.10 grams), to (ii) 121 grains (8.30 grams), (iii) 48 grains (3.706 grams), and (iv) 20 grains (1.971 grams) approximately.[2] This undoubtedly indicates that there were four denominations of gold coins They were also used in the market as one, half, quarter and half-quarter pieces.

Since the purchasing power of gold coins was very high, they were rarely used in daily transactions.[3] They

1. Table I.
2. Vide, Singhi Museum (South Calcutta) Nos. 1, 2, 8, 9, 10, 11, 18, 50, 52, 53, 54, 55, 61, 74 & 83 (vide Kushāṇa coins); and Indian Museum (Calcutta) No. 10 (Huvishka) etc.
3. S.K. Maity, *Economic Life of Northern India*, Vide, Land Sale, and Currency and Exchange.

were also rarely minted in ancient India. Only one gold punch-marked coin is so far known to us.[1] The Indo-Greeks issued a few gold pieces. After that, the Kushāṇas and the Guptas, issued quite a large number of gold coins. Generally, their coins contain a very good percentage of gold. In the later period, Śaśāṅka, the ruler of Bengal, and some of the mediæval Hindu kings somehow or other maintained the gold currency system.[2]

The existence of many types with numerous varieties definitely indicates that the gold coins were minted as currency, and not merely as commemorative medals; only because of their high purchasing power, they were not used in popular transactions. They were, probably, largely hoarded as precious metal, and were melted down and used as jewellery for the richer section of the society. Perhaps for this reason, it may have been thought inessential to mint gold coins in the later period. Why then was there an abundance of gold coins in the Kushāṇa-Gupta period? We know that in the early centuries of the Christian era, gold came from outside India as bullion or as coins as one of the articles of import.[3] We may also conjecture that Bihar gold mines[4] were probably worked out during this period. Prosperity of this period may have led to commercial transactions on a larger scale than was later the case. To meet the needs of the time, the Kushāṇas and the Guptas issued regular gold coinage. Such coinage was, perhaps, hoarded for long periods, and would change hands only occasionally. This is also quite evident from the manner of deposition of gold coin (*Dīnāras*) with the guild banks.[5] Thus, it must have remained current in commerce long after these periods, and the kings of the less prosperous later periods might well have found it unnecessary to issue regular gold coinage.

We have classified our results on the principle of chronology and they are as follows:

Class I

A careful metrological analysis of 200 gold coins of the Kushāṇas, the Kushāṇa chiefs and the Sassanians belonging to the Indian Museum and Sri N. N. Singhi Museum of Calcutta

1. A. L. Basham, *The Wonder That Was India*, p. 505.
2. Vide, Table II. See also my notes in *Alt. Comm. Vol.*, *JNSI*, XXII, pp. 259 ff.
3. Murray, *JRASB*, VI, 1940.
4. Pliny, *Natural History*, XII, 41 (18); *Periplus*, pp. 36 and 160.
5. R. C. Majumdar, *Corporate Life in Ancient India*.

and the British Museum, London provide interesting information.

It can be very well suggested that the coins of the kings listed in Table I of the Appendix given below were minted in the same chronological order as given on the principle of Gresham's Law. Of course, regarding the Sassanians, their gold coins are even purer than Vāsudeva of the Imperial Kushāṇa dynasty. The Sassanians had issued them, when they had established themselves properly over Persia and in some parts of north-western India, when the Kushāṇa power in India was gradually falling down.

In this connection another economic implication should be profitably remembered, i.e. with the decline of the political fortunes of a dynasty the gold content of its coinage declined. Such is the case with the Kushāṇas, the Guptas and many others.

With the exception of the Kushāṇa chief Pasaka, the average gold-content of the coins of the Kushāṇa chiefs are higher than that of the economically depressed Little Kushāṇas. But both these groups of coins are economically much inferior to that of the Imperial Kushāṇas and of the early Imperial Guptas

So far discovered, Kadphises I did not issue any gold coin. His son and successor Kadphises II introduced gold currency along with other metallic coin. Among them number 2 of *IMC* contains 100 per cent gold. But from the point of view of purity the coins of Kanishka I are less by 1½ grains to that of his immediate predecessor Kadphises II. Thus, following the pinciples of Gresham's Law, we can very well suggest that the Kushāṇa group of kings succeeded the Kadphises group.

However, our analysis of the coins leads to the classification of the coins of Huvishka in two groups (A & B) which may suggest the existence of two Huvishkas.[1] But from the point of view of the design and fabric we can not group them so rigidly.

We have no gold coins of Vāsishka at our disposal. This may, however, point to the short rule of Vāsishka. Our study

1. *BSOAS* (1957), pp 77-85. [F. W. Thomas, was perhaps the first to make this suggestion in *JRAS* 1952, p. 108. Allan was supposed to be working on the possibility of classifying Huvishkas from the coins. A. K. Narain is also of the same opinion.]

of the coins also points to the existence of 2 Vāsudevas (I and II) and 2 Kanishkas (I and II).

The most important among those who followed Vāsudeva I are perhaps, Kanishka II and Vāsu or Vāsudeva II. The former is known to us from the Ara inscription and from his coins ; and the latter is known mainly from his coins. Vāsu or Vāsudeva II may be identical with the Yüeh-Chih king Po-t'iao of the Chinese annals. He sent political mission to the Chinese king in A. D. 230.[1]

That the Kushāṇa chiefs, who had perhaps ruled under the sway of the Imperial Kushāṇas, had enjoyed peace and prosperity under them, is also reflected from their gold coins. But after the passing away of the great Kushāṇas, the Little Kushāṇas, for sometime, somehow or other maintained their existence in the Punjab and Afghanistan.

Their power was ultimately crushed by the powerful Śakas, Sassanians, and the Hūṇas. This political turmoil has some reflection on the debased gold coins of the Little Kushāṇas (Class I). On the other hand, from the study of coins we can also notice the affluance of the rising power of the Sassanians.

Class II

Similarly we have throughly examined 235[2] gold coins of the Imperial Guptas from the Indian Museum, Calcutta and the British Museum, London (See Table II). So far as the metrology of these coins are concerned, they follow the standard of their late Kushāṇa prototypes[3] and the weights of the coins of Chandragupta I and Samudragupta agree well with the weights of the late Kushāṇa coins of the third century A. D. They generally vary from 118 to 123 grains. Though the weights vary between 4 to 6 grains, and though there appears to have been very little effort to strike the coins accurately, there was very probably an average standard which may be defined as of 121 grains. But, as Altekar has pointed out, we cannot blame only the Guptas for the variation of weight in their coins. It was rather a common practice in ancient times. The Greek coins found in ancient India vary in their weights. Thus, the weights of the silver coin of Demetrius vary from 55 to 61 grains, when the standard weight of these coins was 67.2

1. *The Age of Imperial Unity* (1st. edn.), p. 151.
2. S. K. Maity, 'The Gold Content of the Gupta Coins etc.', *JNSI*, 1957-58.
3. Cunninghan, *Coins of the Mediæval India*, pp. 14-15.

grains. The coins issued by the Indo-Greek rulers vary greatly. Even the gold Roman *aurei* of Julius Ceaser vary in weight from 120 to 125 grains. But after his death the weight of the *aureus* varies from 114 to 121 grains.[1]

According to Cunningham the earlier Gupta kings follow in their gold issues the Kushāṇa standard of 123 grains, of which about 107 grains are pure gold, for 64 coins of the Kushāṇa kings Vima Kadphises, Kanishka, Huvishka, and the earlier issues of Vāsudeva give exactly the same average weight. But the later coins of Vāsudeva show a falling off of pure gold by nearly 10 grains.[2] The fact is, our own findings show, that the Kushāṇa gold coins contained appreciably more gold than this.[3]

But towards the end of the reign of Skandagupta, the gold coin became much heavier, reaching an average of 144 to 146 grains while the gold content decreased to about 70 grains.[4] This, according to Cunningham, may be taken as a serious debasement. On the other hand, B. P. Sinha[5] has shown that Cunningham's view of serious debasement is incorrect; but certainly the coins of the successors of Skandagupta were usually much poorer in quality than those of their predecessors. Some coins of Narasiṁhagupta and Kumāragupta II (? III) contain as little as 54 grains of pure gold.

It can, however, be said that the earlier Gupta coins, apparently, followed the Kushāṇa weight standard and the later correspond to the *Suvarṇa* standard of Manu, comprising 80 rattis or 144 grains.[6]

Although the later coins became heavier in weight than those of the early kings, the percentage of gold in the coins gradually declined, especially after the later part of the reign of Skandagupta.[7] This was probably due to the bad politico-economic situation created by the invasion of the Hūṇas and the ceaseless trouble over the royal succession after the death of Kumāragupta I.

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1. A.S. Altekar, *Bayana Hoard*, pp. CXX-CXXI.
2. Ibid, f n. 15, pp. 14-16.
3. S K. Maity, *Economic Life of Northern India*, Appendix III, and Chapter, 'Currency & Exchange.'
4. Ibid., f.n. 15, pp. 14-16.
5. *Decline of the Kingdom of Magadha*, p. 61.
6. *Manu.*, VIII, 134.
7. *Economic Life of Northern India*, Appendix III.

It is popularly believed that Skandagupta died at about A.D. 467. He was succeeded by Purugupta, son of Kumāragupta I and the chief queen Anantadevī. But the order of succession to the throne of the Imperial Guptas after the death of Purugupta is highly controversial.

On the basis of our analysis[1] the Gupta geneology can be arranged as Chandragupta I, Samudragupta, Kāchagupta (=?Rāmagupta), Chadragupta II, Kumāragupta I, Skandagupta, Purugupta, Narasiṁhagupta, Kumāragupta II, Kumāragupta (? III), Vishṇugupta and Vainyagupta They had issued their gold coins in the same chronological order on the principle of Gresham's Law.

1. Table II.

Table I

Gr. No.	King/Chief	Average weight in air (in grains)	Average Percentage of pure gold	Average content of pure gold (in grains)	Remarks
1.	Kadphises II	121·10	98·50	119·00	Kings and chiefs have been arranged here on the basis of V. A. Smith in *IMC* & *BMC*. But our order differs on the basis of the Politico-economic implication of these coins (vide elsewhere).
2.	Kanishka	120·45	97·67	117·50	
3.	Huvishka (B)	119·70	96 05	110·70	
4.	Huvishka (A)	122·60	93 45	115·30	
5.	Vāsudeva Kushāṇa	117·85	95 23	102 50	
6.	Vāsu (=? Vāsudeva Kushāṇa)	120·30	83 30	100·40	
7.	Kanishko	107·10	91 15	98·05	
8.	Vāsudeva (Bazodeo)	124·00	94 70	118 00	
		KUSHĀṆA CHIEFS			
9.	Bhadra	119·00	66 86	79 50	
10.	Sayatha	120·25	73·91	89 00	
11.	Sita	118·30	71·25	84·40	
12.	Saṇa	119 20	72 60	86 60	
13.	Bachaiṇa	117 00	67·60	79·25	
14.	Chhu	113 00	82 30	93 00	
15.	Pāsaka	65·30	44·70	29·20	
16.	Peyasa (Addenda)	120 25	75·90	91 50	
17.	Kṛitvīrya	123 00	62 40	76·70	
18.	Sarvayaśa	112·80	54·01	61·00	
19.	Viśva	120·00	62·90	75·50	
20.	Not assignable	118·60	60·05	71·40	
21.	Kushāṇa Sassanian	120·80	89·37	107·90	

Table II

Gr. No.	King	Coin Type	Average weight in air (in grains)	Average percentage of pure gold	Average content of pure gold (in grains)
1.	Chandragupta I	Chandragupta-Kumārdevī	118·00	91·90	109·00
2.	Samudragupta	Standard	116·00	83·50	98·00
3.	,,	Archer	118 00	88·80	104·00
4.	,,	Battle-axe	118·00	82·80	98·00
5.	,,	Tiger	118·00	89·30	105·00
6.	,,	Lyrist	118 00	87·70	104·00
7.	,,	Aśvamedha	118·00	82·70	98 00
8.	Kāchagupta	Kācha	116 00	83·80	98·00
9.	Chandragupta II	Archer	118 00	84 60	99·00
10.	,,	Couch	118 00	80·50	95·00
11.	,,	Horseman	118·70	83·49	91 10
12.	,,	Combatant Lion	120·00	85·16	102·16
13.	,,	Lion-trampler	119·00	87·60	104·20
14.	,,	Umbrella	119 80	87·12	104·30
15.	Kumāragupta I	Archer	122·00	75·20	92 00
16.	,,	Horseman	124 00	71·47	87 50
17.	,,	Peacock	126 80	82·91	105·20
18.	,,	Tiger	125·10	79 00	99·92
19.	,,	Lion	125·20	78 52	98·60
20.	,,	Elephant-rider	124·50	95 65	99.00
21.	Skandagupta	(Group A)	140 00	87 54	122 20
22.	,,	(Group B)	130·50	74 25	97 00
23.	Prakāśaditya (probably Purugupta)	Horseman	143 00	73 00	104·65
24.	Narasiṁhagupta	Archer	141·57	72 48	104·30
25.	Uncertain (Nara- reading doubtful)	Archer	148·20	64·00	95·00
26.	Kumāragupta II	Archer	117·00	70·50	100·10 (Gr. A)
27.	Kumāragupta (III?)	,,	151·40	50·90	77·10 (Gr. B)
28.	Vishṇu (probably Vishṇugupta)	,,	149·15	61·65	92·40
29.	Vainyagupta	,,	141·57	72·50	104·60
30.	Śaśāṅka	Bull-type	139·20	67·00	93·20

SOME ASPECTS OF MATERIAL LIFE ON GUPTA COINS

VIDYA PRAKASH

In India, numismatists have made use of coins for solving various tangible problems of political history, but only few have taken up the extensive coinage for making a critical study of the material culture of the people. In the present paper, we venture to discuss only a few aspects of material life, viz. royal amusements, furnitures and other household materials and weapons of war, as depicted on Gupta coins. There is no denying, that the coins have their natural limitations in furnishing the cultural data; nevertheless, an effort has been made to substantiate them with the help of literary references and sculptural delineations, wherever possible.

I

Royal Amusements

Some of the Gupta monarchs, as we know, were specially devoted to instrumental music, to the extent that Samudragupta[1] and Kumāragupta I[2] got themselves depicted on their coins as playing on a *vīṇā*. The *vīṇā* has been placed in the lap of the king sitting on a high-backed couch. The left hand usually keeps the instrument in position, while the right one is busy with the strings. Some coins depict the king as simply sitting with the instrument, and not playing on it.[3] Other coins depict him as actually playing on the instrument with right hand fingers.[4] The position of Samudragupta's

1. *IMC*, pl XV.4-5; *BMCGD*, pl V. 1-7; *Bayānā Hoard Catalogue* (Abbreviated as *BHC*), pl. VI. 3-8; *JUPHS*, V (N.S.), pt. II, pl. III, 1, 3; *JNSI*, X, pl. VIII. 4; 'Cabinet of American Numismatic Society', *JNSI*, XV, pt. I, pl. III. 10.
2. *BHC*, pl. XXXI. 4-5.
   Bayānā hoard for the first time yielded two specimens of the Lyrist type of coins of Kumāragupta I. Recently, another specimen of the same has been published by Ajit Ghose (*JNSI*, XXII, p. 178, pl. IX. 1). These coins are a close copy of the same type of coins of Samudragupta, but in artistic merit the two issues are far removed.
3. *BHC*, pl. VI. 6, 8.
4. *IMC*, pl. XV. 4-5; *BMCGD*, pl. V. 1-7; *BHC*, pl. VI. 3-4, 7; Ibid., pl. XXXI. 4-5.

fingers on certain coins[1] shows his high skill in *vīṇāvādana*. 'In playing the *vīṇā* whether of the early or modern type, microtones (the *śrutis* of Indian music) can be produced only by controlling the vibrations of the notes. For such control the vibrating string is touched for minutest instant; or on occasions the string is struck simultaneously by the fore and middle fingers from opposite directions, the latter finger stroke being suitably adjusted, or sometimes the finger is rapidly glided along the string; more often the string is deflected. These are extremely difficult and delicate operations calling for highest precision and sensitiveness of touch. Samudragupta's fingers being in the first of the above mentioned manipulative positions, we have here numismatic evidence of his proficiency in music'[2]—a fact which finds corroboration from his Allahabad Pillar Inscription which states that he (Samudragupta) put to shame the heavenly musicians Tumbura and Nārada by his lovely performances of music.[3] Bhitari Pillar Inscription indicates that Skandagupta also could understand musical keys.[4]

The *vīṇās*[5] depicted on the coins are of old type resembling a lyre. They are boat-shaped with a gourd attached to one end (Fig. 1). The hollow belly is covered with a board of several strings. The number of strings is not usually more than four, but in view of the small space on the coins they do not represent the actual number which must have been at least seven, representing seven *svaras*. In one specimen of British Museum, all the seven strings are visible.[6] The upper end of the instrument, which is wholly or partially off the flan on most of the *Vīṇāvādaka* coins of Samudragupta, has a knob and is internally curved (Fig. 2).[7] In one specimen the upper end turns inside forming a semi-circle (Fig.3)[8] with the usual knob. Curved stem of the *vīṇā* remained generally plain during the time of Samudragupta but the mint-masters had started decorating

1. *IMC*, pl. XV. 4; *BMCGD*, pl. V. 1-7; *BHC*, pl. VI. 3-4; *JNSI*, X, pl. VIII. 4.
2. *JNSI*, X, p. 129.
3. Fleet, *CII*, III, No. 1, p. 8.
4. Ibid., No 13, p. 55.
5. Kālidāsa mentions this instrument under different names such as *vīṇā* (*Raghuvaṁśa*, VIII. 33), *parivādinī* (Ibid., VIII. 35), *vallakī* (Ibid., VIII. 41; See also *Bṛihatsaṁhitā*, Chaukhamba, Varanasi, 1959, 76/2), *sutantrī* (*Ṛitusaṁhāra*, I. 3).
6. *BMCGD*, pl. V. 2.
7. *IMC*, pl. XV. 4; *BMCGD*, pl. V. 7; *BHC*, pl. VI. 3,6-8.
8. *BHC*, pl. VI. 5.

it with corrugation and rings.[1] By the time of Kumāragupta I, this decoration became an essential feature, as both the specimens of Bayānā hoard, belonging to that king, are decorated likewise.[2] Bāṇa states that they were made of ivory.[3] The gourd attached to the lower end of the stems increased the vibrating sound of the strings. In some *vīṇās* the gourds are bulky[4] while in others they are narrow.[5] The size of the gourds varied to produce different tunes and volumes. Bāṇa also informs that *vīṇās* used to have a gourd and they were so bulky as to hide sharp knives.[6] The *vīṇās* resembling those on the coins are found in Ajanta paintings.[7] Sometimes they are triangular in shape.[8] Probably this was a variety of harp-shaped *vīṇās*. It may be noted here that the type of *vīṇā* depicted on Gupta coins resembles its counterpart in the early sculptures of Bhārhut, Bhājā, Besnagara, and Amarāvatī etc.[9] Even earlier, in the pre-historic rock-paintings such harps can be seen in the dancing scenes, but there, the gourd has been attached in a very crude manner.[10] This early form of *vīṇā*[11] passed through various alterations and gradually developed into a long hollow semi-cylindrical body with a number of keys on its sides for tying the strings. To the lower and upper ends respectively was attached a square sound board and a hollow gourd. In the further development the square sound-board was replaced by a round gourd. Regarding the number of gourds, there is an interesting reference by Hemachandra who likens the youthful lover's arms to the *daṇḍa* of a *vīṇā*, lying over the two gourds, to which are likened the breasts of the lady

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1. *BHC*, pl. VI. 3-4 ; *JNSI*, X, pl. VIII. 4.
2. *BHC*, pl. XXXI. 4-5.
3. Agrawala, V. S., *Kādambarī*, 133/142.
4. *IMC*, pl. XV. 4 ; *BMCGD*, pl. V. 1-7 ; *BHC*, pls. VI. 3-4, 7 ; XXXI. 4-5 ; *JUPHS*, V, pt. II, pl. III. 1, 3 ; *JNSI*, X, pl. VIII, 4.
5. *IMC*, pl. XV. 5 ; *BHC*, pl. VI. 5.
6. *Harshacharita* (Cowell & Thomas), p. 193.
7. *Ajantā* I, p. 29.
8. Ibid., II, p. 17.
9. Coomaraswamy, 'The Parts of a Viṇā', *JAOS*, 50, p. 244.

   The boat-shaped *vīṇā* with seven strings has been depicted in 'Vāsavadattā Udayana' terracotta of Suṅga period, in the right hand of king Udayana a famous *vīṇā*-player (Bhārata Kalā Bhavana, *JUPHS*, XVIII, pt. I & II, p. 86, Figs. 3, 4).
10. Gordon, D. H., *The Pre-historic Background of Indian Culture*. Fig. 14. 2.
11. See also Munshi, *The Saga of Indian Sculpture*, pl. 8.

love.[1] The prototype of modern *vīṇā* is traceable only from the Pāla Period[2], therefore the earlier *vīṇās* must have been like those depicated on Gupta coins. A beautiful terracotta of Rupar from Gupta levels[3] shows the figure of a lady in round, sitting cross-legged, and playing on the harp-shaped *vīṇā*. The sitting posture of the lady and the manner of placing the *vīṇā* on her left thigh is reminiscent of Samudragupta's figure in similar position on his coins.[4]

Stringed instruments are generally played with the help of a wire-ring, popularly known today as *mijarāb*. According to *Pratijñāyaugandharāyaṇa* of Bhāsa and a reference in the *Nāṭyaśāstra* of Bharata, *vīṇā* was played upon with finger-nails.[5] In *Kādambarī* the *vīṇā* is being played with the help of ivory *mijarāb* (*dantakoṇa*).[6] On some coins the right hand fore finger of the *vīṇā* player is unusually long[7], indicating that the player is wearing some such accessory as *mijrāb* or *nakhī*.

Music was a source of pleasure and means of relaxation to the kings, who while playing on *vīṇā*, are shown as wearing only a short *dhotī*, the upper part of the body being bare. The hair are covered by a close-fitting cap, bordered by pearls. This is quite an informal house-dress. Here the king is only a man of feelings and emotions, trying to sink all fret and fever of life in the fluctuating tunes of *vīṇā* for sometimes. A. S. Altekar imagines that the coins represent the king as 'seated on the terrace of his palace on a summer evening and engaged in spending his rare leisure hours in music'.[8]

Other pastime depicted on coins is hunting. The fondness of Gupta kings for this sport is evident from their numerous coin-types, depicting hunting scenes.[9] The learned

1. *Trishashti Śālāka Purusha Charit*, Quoted in *ABORI*, XII, p. 369.
2. *JAOS*, 50, p. 244.
3. *Ancient India*, No. 9, p. 126, pl. L. B.
4. In almost similar posture, a lady has been shown as playing on a harp-shaped *vīṇā*, with seven strings, on a sculptured lintel belonging to Gupta period, found at Pawaya (Mookerji, R.K., *The Gupta Empire*, pl. XIX.)
5. *ABORI*, XII. p. 363.
6. *Kādambarī*, op. cit., p. 389.
7. *BHC*, pl. VI. 3; *JNSI*, X, pl. VIII. 4.
8. *BHC*, Intro., p. LXIX.
9. They include the following: Samudragupta's Tiger-slayer type [*BMCGD*, pl. II. 14-15; *BHC*, pl. VI. 9-10; *JASB*, 1884, I, pl. II. 10; Ibid., 1894, I, pl. VI. 2; *JRAS*, 1889, pl. 2], Chandragupta II's Lion-slayer

authors of past have described several advantages of hunting or *mṛigayā*. According to Kāmandaka they were 'exercise, the disappearance of phlegm, bile, fat and sweat, the acquisition of skill in aiming at stationary and moving bodies, the ascertainment of the minds of beasts when they are provoked, and occasional travel.'[1] Kālidāsa dwells upon the merits of hunting almost in the same words.[2]

The coins of hunting series reveal that the game was played from horseback, from elephant's back and on foot. Hunting from the horseback is to be found depicted on the coins of Kumāragupta I (Rhinoceros-slayer type) and Prakāśāditya (Horse-rider-lion-slayer type). Besides rhinoceroses and lions, the kings shot down antelopes, deers, bisons, yaks and so on[3]. On both the coin-types mentioned above, the king is attacking the beast with a sword which was obviously the most convenient weapon when the animal was close up. The hunters were equipped with bow also which must have been used when the beast was at some distance. On the coins of Prakāśāditya, the bow has been hung on the left shoulder in the *upavīta* manner[4] and *not* slung behind as observed by Smith.[5] *Raghuvaṁśa* gives a graphic description of king Daśaratha's hunting from the horseback.[6] Putting on a dress suitable for the purpose of going to the forest,[7] he used to shoot the animals with bow and arrow[8]. Horse, on both types of coins, is fully caparisoned.

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type [*IMC*, pl. XV. 16-17 ; *BMCGD*, pl. VIII. 11-17 ; *BHC*, pls. XVI. 8-15, XVII. 1-14, XVIII. 1-10], Kumāragupta I's Tiger-slayer [*IMC*, pl XVI. 4 ; *BMCGD*, pl. XV. 1-4 ; *BHC*, pl XXVII. 1-15], Lion-slayer [*IMC*, pl. XVI. 5-9 ; *BMCGD*, pl. XIV. 1-17], Elephant rider-lion slayer [*BHC*, pl. XXX. 1-4 ; *JASB*, 1917, p 155] and Rhinoceros slayer [*BHC*, pl XXX. 5-8] types and Prakāśāditya's Horse-rider-lion-slayer type [*IMC*, pl. XVI. 10, Nos. 1-5, p 149 ; *BMCGD*, pl. XXII. 1-6 ; *BHC*, pl. XXXII. 10] Apart from the aforesaid coins, the Archer type of different kings also hints towards hunting.

1. *Kāmandaka*, XIV. 25 ; cf. *Arthaśastra*, VIII 3.
2. *Śākuntala* (Chaukhamba), II. 5, pp. 19-20 ; See also *Raghuvaṁśa*, IX. 49.
3. *Raghuvaṁśa*, IX. 53-66.
4. *IMC*, pl. XVI. 10 ; *BMCGD*, pl. XXII. 1-5 ; *BHC*, pl. XXXII. 10, p. 312.
5. *IMC*, p. 118.
6. *Raghuvaṁśa*, IX. 50-60.
7. Ibid., IX. 50.
8. Ibid., IX. 55, 61

Hunting from elephant's back has been depicted on the coins of only one Gupta emperor, namely Kumāragupta I (Elephant-rider-lion-slayer type). The king is riding a caparisoned elephant, with a dwarf attendant behind him, holding a *chhatra* over his head. He is holding a dagger, in the posture of attack[1]. The elephant is also trying to trample the beast by his front left leg. Probably, the elephants which were used as mounts in hunting expeditions were imparted special training.[2]

A large number of coins of Lion slayer and Tiger-slayer types depict the hunting on foot. The weapon used was usually bow and arrow. The animals have been shown very close to the hunter, which, however, does not appear to be a realistic representation. The very presence of bow and arrow, the weapon of missile class, proves that the animals must have been at some distance, may be, within jumping range of the hunters. On a unique Lucknow Museum specimen, the hunter is attacking the lion with a sword.[3] Here no doubt, the beast might have been close to him For hunting on foot, the dress used to be very light, consisting of a waist-cloth, a close-fitting *jāṅghiyā* or simply a *laṅgoṭa*. The torso remained bare. Kālidāsa has not mentioned this dress for royal hunters, but he does refer a particular dress worn at the time of hunting[4].

Like Lyrist and Hunting type of coins to show their preference, respectively, for music and hunting, the Gupta kings issued Horseman type of coins to show their love for horse-riding. Chandragupta II was the first Gupta monarch to introduce this motif on coins. Later it was continued by Kumāragupta I. Both the kings issued distinctly two types—one, on which the king is riding a caparisoned horse, carrying the weapons, like bow or arrow[5]; the other, on which he is simply riding the horse without

1. *BHC*, pl XXX. 1-5.
2. Cf. *Arthaśāstra*, II. 32,
3. *Lucknow Museum Catalogue*, Gupta and Maukharī etc. (Abbreviated as *LMC*), p. 21, No. 88; *Num. Chron.*, 1910, p. 406, pl. XIV. 14; *BMCGD*, pl. IX. 13.
4. *Raghuvaṃśa*, IX. 50.
5. Chandragupta II: *LMC*, pl. XV. 15; *BMCGD*, pl. X. 6-7; Ibid., pl. IX 15; *BHC*, pl. XIII. 13; Ibid., XIV. 2-6; *Num. Chron.*, 1889, pl. II. 5; Ibid., 1910, pl. XIV. 4-5.
Kumāragupta I: *BMCGD*, pl. XIII. 11-19; *BHC*, pls. XXII. 7, XXIII. 1-15, XXIV. 2-15, XXV. 11-15; *JASB*, 1852, pl. XII-8; *JRAS*, 1889, pl. II, 14.

any weapon.[1] It is only the latter type of coins, which should be taken to represent the riding for the sake of sport, while the former obviously depicts the king as going in some military expedition. Our assumption gets strength when we find that on some coins[2] of the second category, the king is wearing only a short *dhotī* and the torso is naked. He does not wear any turban or head-dress, and the curly hair have been left loose. This is certainly not an official dress, but an informal one, suitable for the time of his recreations. We have already noted that Samudragupta was similarly attired when engaged in his favourite pastime of *vīṇāvādana*.

Elephant riding was another outdoor sport favourite to kings. It has been depicted on some rare coins of Kumāragupta I (Elephant-rider type).[3] They show that kings went on elephant ride accompanied by an attendant who held a parasol over king's head from behind. The king sat on the neck of the animal with a goad in right hand. Obviously he himself drove the animal. The position of the legs and trunk of the elephant, as well as the flowing banner of the parasol indicate the running speed of the animal. The king's dress is not clear, but possibly he is wearing only a short *dhotī* and the upper part of the body is bare. King's left hand has been placed on the waist with ease, which shows that he has perfect confidence on his skill of controlling the giant animal.[4]

The coins also indicate the royal love of birds. The Peacock type of Kumāragupta shows him, either as feeding grapes to a peacock[5], or pointing something to the bird.[6] In the latter case, the king is obviously playing

1. Chandragupta II : *BMCGD*, pls. IX. 14-17, X. 1-2, 4-5, 11-13 ; *BHC*, pls XIII. 6-12, XIV. 8, XI. 3.
   Kumāragupta I : *BMCGD*, pl. XIII. 1-9 ; *BHC*, pls. XXII. 1-6, 8-15, XXV. 1-10, pp. 263-69 ; *JASB*, 1884, pl. III. 12 ; *JRAS*, 1889, pl. II. 13.
2. *BMCGD*, pl. X. 1, 13 ; *BHC*, pl. XIII. 8-12, pp. 167-68.
3. *IMC*, pl. XVI. 7 ; *BMCGD*, pl. XV. 16 ; *BHC*, pl. XXXI. 1-3.
4. Kālidāsa has described (*Raghuvaṁśa*, XVII. 32-33) the elephant ride of Kuśa who paraded on 'an elephant equal in strength with Airāvata'. A white umbrella was raised over his head.
5. *BMCGD*, pl. XV. 5-11 ; *BHC*, pl. XXVI. 1-10 ; *IMC*, pl. XVI. 3 ; Prince of Wales Mus., *JNSI*, XI, pl. I. 13.
6. *BMCGD*, pl. XV. 12-14 ; *BHC*, pl. XXVI. 11-13 ; *IMC*, Nos. 117-18, pp. 30-31.

with the peacock, while in the former, he is feeding his pet with his own hands. On one variety of the Couch type of Chandragupta II[1] also, the king appears to be feeding some fruit, with long stalk, to a bird which is only partially visible. The king is sitting on a throne with left elbow resting on its back. According to the description of Altekar, the king is offering by the right hand a 'lotus bud, apparently to an object of worship which is but half visible and cannot be identified'.[2] The sitting posture of the king is easy one and it is not respectful at all. Hence his offering lotus bud to 'an object of worship' does not appeal. He is most probably feeding some bird with ease. These coins seem to have been inspired by the Lyrist-type of Samudragupta. It appears that Samudragupta issued that type because he was interested and well-versed in *vīṇā*. Chandra-Gupta II was not so. He was interested in keeping pet birds, and so issued certain coins to depict his hobby, like his father.

II

Furnitures and Other Household Materials

Gupta coins provide a rich variety of furnitures of every-day use, consisting of different types of thrones, bedsteads, stools, footstools, umbrellas, flywhisks and so on. Their decorations and manipulations speak high of the carpenter's art which kept pace with the spirit of the age which is marked by an all-round development in culture and art.

THRONE (*siṁhāsana*[3], *āsana*[4])

The throne was a simple structure, comprising of a square or rectangular board, supported by four legs, with or without a back. The seat was cushioned or thickly padded which is clear from the depressions caused by the weight of the sitting figure.[5] Contemporary sculptures also show a thick cushion placed on the flat rectangular seat.[6] The backs are also padded in some cases, besides other ornamentations.[7] The

1. *BHC*, pl. XVIII. 11; Prince of Wales Mus., *JNSI*, XI, pl. I. 12. In the latter specimen, the bird has not been accommodated on the lap at all.
2. *BHC*, p. 206.
3. *Raghuvaṁśa*, VI. 6.
4. *Bṛihatsaṁhitā*, op. cit., 79-1-20, pp 481 ff.
5. *BMGGD*, pls. I. 1-2, 11-13, V. 1-7; *BHC*, pls. I. 11, 14, 15, II 12-13.
6. *Sarnath Museum Catalogue*, pl. X.
7. *BMGGD*, pl. V. 1, 3-7; *BHC*, pl. XVIII. 11; Prince of Wales Mus., *JNSI*, XI, pl. I. 12.

legs of the thrones display at least a score of different fanciful shapes. They are invariably machine-turned. The following are different varieties of thrones found on the coins:

1. There were rectangular thrones with a high vertical back to lean against (Fig. 4).[1] The four legs are moulded and chastely designed. The seat board and back are respectively cushioned and padded. The right hand vertical rod of the back is made of small balls, while the left one is plain. The surmounting piece is bow-shaped. Sometimes the small balls decorated the entire frame of the back (Fig. 5).[2] In a few specimens, the beaded decoration is confined only to the surmounting piece which is bulging in the middle (Figs. 6^3-7^4). It is notable that the arm-rest is absent, not only in this variety, but in all the varieties of thrones depicted on Gupta coins. We get several varieties of thrones in contemporary Ajantā paintings, but such backs are not to be found there, nor, if we are not wrong, in contemporary sculptures.

2. Some seats were rectangular as above, but they had a slanting low back, attached to one of the smaller sides, in place of an erect one (Fig. 8).[5] The surmounting bar of the back was straight, with knobbed ends projecting on either side. Beaded decoration is missing on the left hand rod. This may be an oversight of the die-cutter. In some thrones (Fig. 9)[6], the slanting back was attached to the longer side. The vertical rod of the back ended in a knob at the top, while four small balls above the surmounting piece, decorated the combination. Slanting backs also, are not known from Ajantā paintings. But for their delineation on coins, we would have not known an important variety of throne of Gupta times.

3. There were square thrones also (Fig. 10)[7], with a high back, the top of which was semi-circular. The edge of the back had beaded decoration. In general appearance these thrones are like a similar type of representation in Ajantā (Fig. 64)[8], but the details of both vary a great deal. One specimen of square throne is remarkable for its well decorated legs (fig. 11).[9]

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1. *BMCGD*, pl. V. 1 ; *BHC*, pl. VI. 4.
2. *BMCGD*, pl. V. 4.
3. Ibid., pl. V. 3.
4. *JNSI*, XV, pt. I, pl. III. 9.
5. Ibid., pl. V. 5-7.
6. *BHC*, pl. II. 14.
7. *BHC*, pl. VI. 7.
8. *Ajantā*, II, pl. XXVII.
9. *Coins of India through the Ages* (Madras, 1953), pl. I. 8.

4. A few specimens (Fig. 12)[1] show a square chair with a back which was made of two vertical rods, joined by a double line of cross-bars in the upper half. There was no padding in the back, but the seat was cushioned. In some chairs (Fig. 13)[2] the cross-bars were widely separated and the vertical rods ended on the top into balls, one upon another. In a few specimens[3], they ended in a single knob, while in others (Fig. 15)[4], they were segmented on the top.

5. Some chairs were again square with a simple back, consisting of two vertical rods, joined by a horizontal one near the top. It appears that the seat was not cushioned but an extra padding was spread on it and the legs were slightly sturdy (Fig. 14).[5] In Ajantā, the low thrones of the same type (Fig. 62)[6] have a back of beautifully carved square posts, surmounted by a similar piece. Other specimens of this type on coins had cushioned seats. Some were decorated by a single ball at each corner of the seat (Fig 15), while others had three balls at each corner (Figs. 16[7] and 17[8]). Sometimes the balls decorated the entire edge of the seat (Fig. 18).[9]

6. Some seats had no back at all (Fig. 20).[10] They are invariably square and cushioned. Some of them had short sturdy legs (Fig. 21)[11] and the lower half resembled a bell. Others (Fig. 22)[12] had also the sturdy legs, but with slightly different type of moulding. There were four small balls, one at each corner on this type of seats also. Some of them (Fig 23,[13] had sturdy but ornamental legs and there were four square pieces instead of round balls at each corner. Certain seats (Figs. 24,[14] 25,[15] 26[16]) had comparatively long legs which were slender and well turned.

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1. *BMCGD*, pl. I. 1-3.
2. Ibid., pl. I. 5.
3. Ibid., pl. I. 6.
4. Ibid., pl. I. 14, 16-17.
5. Ibid., pl. I. 6.
6. *Ajantā*, I, pl. V.
7. *BMCGD*, pl. IV. 3; *BHC*, pl. I 12.
8. *BHC*, pl. I. 12.
9. *BMCGD*, pl. I 12.
10. *BMCGD*, pl. IV, 4, 16.
11. *BHC*, pl. VII. 13.
12. *BHC*, pl. II. 9.
13. Ibid., pl. II. 6.
14. Ibid., pl. III. 14.
15. Ibid., pl. VIII. 4.
16. Ibid., pl. II. 7.

The square seats with or without a decorated back are frequently seen in Ajantā frescoes. Their legs are sometimes short and bell-shaped (Fig. 63)[1], sometimes long slender and chastely designed (Fig. 61)[2], somewhat like those of our coins.

The thrones, according to contemporary literature, were made of gold[3], ivory[4] and precious stones.[5] The wood recommended for the manufacture of seats (*āsana*) and bedsteads (*śaiyyā*) was *vijayasāra, spandana, haridrā, surudāru, tindukī, śāla, kaśmarī, añjana, padmaka, śāka* and *śiṁśapā*.[6] Often the ivory was used along with the wood.[7] The back of the thrones had beautiful carvings. The Sārnath Buddha (Gupta Period)[8] is seated on a throne, the back of which is beautifully carved with animal motifs and floral designs and the legs are moulded. Some sculptures[9] as well as paintings[10], however, show plain backs also. The coins nowhere depict flat backs, either plain or decorated. They show only backs of vertical or cross bars or those with paddings. As a matter of fact, the carved backs could not be represented in the small space of the coin.

BEDSTEAD (*śaiyyā*)[11]

On certain coins we can recognise the bedsteads. They were rectangular with four finely chiselled legs (Fig 27).[12] Their shape is more or less similar to the modern beds. Sometimes they were provided with a back which was padded and had ornamented edge (Fig 28).[13] The latter variety has been carved and finished much more carefully. It is accompanied by a spittoon which is a necessary accessory to bedstead in the Indian tradition.[14] The beds seem to have been used both for sleeping and simply for sitting or reclining, as on sofas.

1. *Ajantā*, I, pl. XXI (b).
2. Ibid., II, pl. XVI (a).
3. *Raghuvaṁśa*, VI. 6.
4. Ibid., XVII. 21.
5. Ibid., VI. 4 ; *Kādambarī*, op. cit., p. 22.
6. *Bṛihatsaṁhitā*, op. cit., 79/2, p. 481.
7. Ibid., 79/19, p. 483.
8. *Sarnath Mus. Cat.*, No. B (b) 181, pl. X ; Ibid., No. B (b) 185, p. 72.
9. Ibid., No. B (b) 182, p. 71.
10. *Ajantā*, II, pl. XIX.
11. *Śākuntala*, op. cit., III. 39, p. 228; *Raghuvaṁśa*, V. 65.
12. *BHC*, pl. XVIII. 12-13
13. *BHC*, pl. XVIII. 11 ; *JNSI*, XI, pl. I. 12.
14. Cf. Mitra, R. L., *Antiquities of Orissa* (Indian Studies : Past & Present, II, No. 2, p. 325).

On the present specimens, the king is either sitting, or reclining on it.

MOṚHA (*veṭrāsana*[1])

The *moṛhās* have extensively been depicted in different varieties and forms. From shape and appearance, they appear to have been manufactured of cane and bamboo. They may be identified with *veṭrāsana* of Kālidāsa.[2] They were considered to be one of the best kind of raised seats, as different goddesses have been represented sitting on them. In general appearance, they are just like their modern counterparts.

The *moṛhās* are invariably round; some are bell-shaped, with circular base bigger than the upper seat (Figs. 29[3], 30[4], 31[5], 32[6], 41[7], 51[8]). The circular seat of some *moṛhās* was too small in comparison with base, thus making a sharp taper in the body (Fig. 40[9]). Some seats of this type were long and narrow (Figs. 36[10], 37[11], 38[12], 39[13]), while others were heavy, with comparatively large base (Figs. 50,[14] 51[15]). Sometimes the sides took a slight curve near the base (Fig. 46).[16]

The next variety of *moṛhās* had a narrow belly, with seat and base almost equal (Figs. 35,[17] 44,[18] 45,[19] 47,[20] 48[21]), resembling a *ḍamarū*. Sometimes the circular frame of the seat and base was made projecting from the body (Figs.

1. *Kumārasambhava*, VI. 5[3].
2. Cf. Upadhyaya, B. S., *India in Kālidāsa*, p. 215.
3. *BMCGD*, pl. V. 3.
4. Ibid., pl. V. 1.
5. Ibid., pl. V. 4.
6. Ibid., pl. X. 4.
7. Ibid., pl. XIII. 15.
8. *BHC*, pl. XII. 9.
9. Ibid., pl. XXIII. 15
10. *BHC*, pls. XIII. 8, XIV. 7.
11. *BMCGD*, pl. V. 8.
12. Ibid., pl. XIII. 5.
13. Ibid., pl. X. 1.
14. *BHC*, pl. X. 9.
15. Ibid., pl. XII. 9.
16. *BMCGD*, pl. IX 16.
17. *BHC*, pl. XIV. 11.
18. Ibid., pl. VI. 6.
19. Ibid., pl. XIII. 9.
20. *BMCGD*, pl. X. 6.
21. Ibid., pl. XIII. 6.

47,[1] 48,[2] 53[3]). In a few specimens, this projection is to be found only in the base (Fig. 49).[4]

Another variety had straight vertical side (Figs. 33,[5] 34,[6] 52[7]). Some of them were large and heavy and might have been square in plan (Fig. 52).

A peculiar variety of this cane furniture (Fig. 54)[8] resembled the modern cane chairs. It had a foot-board and also an extremely low back to lean against.

The *moṛhās* of all the varieties have been so made as to present different designs and patterns of leaves (Figs. 29-31, 43), circles (Figs. 29-30, 46-47), triangles (Figs. 39, 53), straight and wavy lines (Figs. 40, 42, 48), loops (Fig. 52), and intersecting loops (Fig. 50). The upper edge in most of the cases has been decorated with small balls of different sizes (Figs. 32, 33, 35, 38, 47, 50-54).[9] In certain specimens, the ball-decoration is to be found on the basal edge (Figs. 45, 46).

The *moṛhās* are not encountered with in the paintings of either Ajantā or Bāgh. In sculptures also their representation is limited. It is from the coins alone, that we get such a large and rich variety of this light and handy furniture of cane.

Sohoni has compared these *moṛhās* with certain wicker stools of Amarāvatī sculptures, and says that they were used in ladies' dressing rooms.[10] But it is difficult to agree with him. Firstly because, the object in the right hand of the female figure, sitting on the *moṛhā* on certain coins, is definitely not a *vibhrama darpaṇa* (which was the basis of his conclusion), as speculated by him.[11] It is clearly a flower or flower-bud, made evident by the curved stalk. Secondly, the

1. *BMCGD*, pl. X. 6.
2. Ibid., pl. XIII. 6.
3. Ibid , pl. XIII. 1.
4. Ibid., pl. XIII. 9.
5. *BHC*, pl. XV. 2.
6. Ibid., pl. XV. 3.
7. Ibid., pl. XIV. 12.
8. *BMCGD*, pl. XIII. 19.
9. See also *BHC*, pl. XXII. 3-5, 12-15.
10. *JNSI*, XIX, pt. II, p. 158.
    The wicker stool of Amarāvatī and Guptā coins are not quite similar. The former has a medium-sized back and a circular armrest (Ibid., Fig. IV), while the latter has no such addition.
11. *JNSI*, XIX, pt. II, p. 159.

fact that this stool was used by the deities also, shows that it was not merely a dressing room furniture.

MODE OF SITTING

The most common mode of sitting on the thrones was to hang both the legs downwards, resting on a decorated circular mat.[1] In leisure hours generally the cross-legged position was preferred, in which case the left leg hanged downwards, while the right one was turned at the knee to go beneath the opposite thigh.[2] Sometimes sitting in a similar manner, the weight of the body was thrown over the left hand which rested on the throne.[3] At times, when at ease, the body was made to recline at the back, with left elbow resting on it; both the legs were turned, but while the left knee lay on the bed, the right one was raised upwards.[4] Here one is reminded of the king's posture described by Kālidāsa, as 'resting his left arm on one half of his seat, in consequence of which, his shoulder raised up a little.'[5] On one rare coin (King-and-queen on couch type), the king and queen both are sitting on the same throne, facing each other.[6] Such compositions have frequently been represented by Ajantā painters.[7] The usual mode of sitting on cane *moḍhās* was either to allow both the legs to hang downwards[8], or to make a cross by the lower part of the legs.[9]

The footmat as represented on the coins is invariably circular. It was beautifully embroidered with different designs.[10] In Ajantā, they are set with shining pearls in a circle.[11] The other object on which the feet rested was a box-shaped footstool.[12] Its depiction on the coins is scanty

1. *BMCGD*, pls. I 1 17, II. 1-5, IV. 1-7, VI. 1-5; *BHC*, pls. I. 11-15, II. 1-15, III. 1-15, VII. 13, VIII. 1-15, IX. 1-5.
2. *BMCGD*, pl VI. 1-7; *BHC*, pls. VI. 3-8, XVIII. 11; *JNSI*, IX, pl. I; See *Ajantā*, II, pl. XXXIII. (b), for some what similar posture.
3. *BHC*, pl. XXXI. 4-5; *BMCGD*, pl. VI. 8-9, and *BHC*, pl. XVIII. 12-13 (Here right leg is not beneath the left thigh).
4. *BHC*, pl. XVIII. 11.
5. *Raghuvaṁśa*, VI. 16.
6. Bhārata Kalā Bhavana Coll, *JNSI*, XVIII, pt. I, p. 52.
7. Herringham, pl XV.
8. *BMCGD*, pls. X. 4, XIII. 11-19; *BHC*, pls. VI. 3-5, XXII. 1-7, XIII. 5, 8, 14-15.
9. *BMCGD*, pl. XIII. 4-10; *BHC*, pls. VI. 6, XIII. 6-15. XIV. 1-4, 6-10, XXII. 8-14, XXIII. 10, XXV. 1-10.
10. See foot note 1.
11. *Ajantā*, I, pl. XVII.
12. *BMCGD*, pl. V. 1-7; *BHC*, pl. VI. 3-4.

and that too, with no peculiarity. Ajantā paintings present far greater number and better varieties.[1]

UMBRELLA (*chhatra*,[2] *ātapatra*)[3]

Chhatra was as much a means of protection from sun and rain, as an insignia of royalty. It used to be held by male and female attendants over the head of their master or mistress, as the case may be.[4] The coins show the following varieties of *chhatra* :

1. *Chhatra* with flat top and raised edge. Supporting stem in the centre is plain (Fig. 55).[5]

2. Convex *chhatra* of the form of a mushroom with plain (Fig. 56)[6] or segmented (Fig. 57)[7] stem (*daṇḍa*), turned on a lathe. The pierced projecting portion is decorated. Sometimes a banner was fastened to the stems.

At Ajantā we get two types of umbrellas; one convex-topped which was used by kings and rich persons (Fig. 65)[8], the other one had a flat top which widened towards the outer rim (Fig 68)[9] and was used by ordinary persons. The stems of convex *chhatras* of Ajantā are also often fastened with banner (Fig. 66)[10]. Sometimes the jewellery and pearls are hanging from the circular edge of the *chhatra* (Fig 67)[11]. Other details of the umbrellas can be gathered from the sculptural representations of *chhatras*, which were obviously copied from the actual parasols. An early specimen of stone parasol of Kushāṇa period shows that the inside of *chhatra* had decoration of concentric circular bands, and the morticed projection in the centre assumed the shape of a lotus flower.[12]

1. *Ajantā*, II. pls. XII, XVI, XIX.
2. *Bṛihatsaṃhitā*, op. cit 7/1-63, p. 458.
3. *Śākuntala*, op. cit., V. 5, p. 315.
4. *BHC*, pls. XV. 4-15, XVI. 1-7 ; *BMCGD*, pl. VIII. 1-10 ; Nagpur Mus., *JNSI*, XVII, pt. II. p. 103 ; Kusumbhi Hoard, Ibid., XV, pt. I, pl. III. 8 ; *BHC*, pl. XXX. 5-8.
5. *BMCGD*, pl. VIII. 8.
6. *BHC*, pl. XV. 14.
7. Ibid., pl. XXX. 5 ; *JNSI*, XXII, pl. IX. 3.
8. *Ajantā*, I, pl. X (b).
9. *Ajantā*, I, pl XXI (b).
10. Ibid., pl. XVI.
11. Ibid. ; See *Kādambarī*, op. cit., p. 124, for the reference of such umbrella.
12. *Sarnath Mus. Cat*, No. B (a) 1, p. 34, pl. VIII.

A stone *chhatra* of ealy Gupta period[1] has fine holes on its outer rim, probably for hanging jewellery or flowers.

Bṛihatsaṁhitā recommends that the parasols should be covered with such material as the feathers of beautiful birds and cloth, and the handle should be made of wood, plated with gold.[2] Our coins do not show the covering of feathers. The *chhatra* was used both by men and women, as seen respectively on *Chhatra* type of Chandragupta II, and Rhinoceros-slayer type of Kumāragupta I. On the former the king is seen standing under a parasol, held by a dwarf.[3] On the latter, goddess Gaṅgā is being attended with a *chhatra*. She is described in *Kādambarī* also as having a white umbrella spread over her head.[4]

FLY-WHISK (*chāmara*[5])

Chāmara is another object associated with royal glamour, besides being an object of utility. It has been shown in the hand of queen on *Aśvamedha* type of coins. It consisted of a handle, either plain or segmented, mounted by a mass of flowing hair (Fig. 58)[6]. There is not much variety in handle, but the hair are sometimes long and flowing[7], sometimes short and bushy.[8] One specimen shows short and stiff hair (Fig. 59).[9] Contemporary paintings also depict the fly-whisks with long and flowing (Fig. 69)[10], or short and stiff, hair (Fig. 70).[11] One specimen of Ajantā has a beautifully moulded *daṇḍa*, and the hair have several locks (Fig. 71)[12].

Fly-whisk has been frequently delineated in the sculptures from the earliest times, but there is hardly any notable development or change in its style and make. The *chaurī* in the hand of Dīdāraganj yakshī[13] is almost of the same type as that in the hand of queen on Gupta coins, and the paintings

1. *Sarnath Mus. Cat.*, No. D (c) I, p. 229.
2. *Bṛihatsaṁhitā*, op. cit., 73|1-3, p. 458.
3. Saletore is inclined to think that Chandragupta II appeared and departed in assembly hall in this manner (*Life in Gupta Age*, p. 179).
4. *IC*, I, p. 203.
5. *Śākuntala*, op. cit., I. 8, p. 18.
6. *BHC*, pl. IV. 15.
7. *BMGD*, pl V. 12 ; *BHC*, pl. IV. 6, 11-13, 15.
8. *BMGD*, pl. V. 11, 13 ; *BHC*, pls. IV. 1-2, 7-10, 14, V. 4.
9. *BHC*, pl. XXX. 10.
10. *Ajantā*, I, pl. X (a).
11. Ibid., I, pl. XII.
12. *Ajantā*, I, pl. V.
13. Ray, N.R., *Maurya and Śuṅga Art*, Fig. 30.

of Ajantā, and the same shape continued in the sculptures of medieval period.[1]

According to *Bṛihatsaṁhitā*, the handle of *chāmara* should be made of fine wood, mounted with gold, silver and jewels, and its length should be one and a half cubits[2].

SPITTOON

Spittoon is an important item of furniture, associated with bedsteads.[3] It is found depicted near the bed on King-and-queen-on-couch[4] and Couch types[5] of Chandragupta II (Fig. 28). The spittoon of coins has an out-turned bead rim, and a pedestal base (Fig. 60)[6]. A somewhat similar type of spittoon, in the same context, is to be found in Ajantā (Fig. 74).[7] Other representations of Ajantā are slightly different in shape. They have no pedestals for the base (Fig. 75).[8] The presence of spittoons shows the use of betel leaves for which India is so famous.[9]

III

Weapons of War

The Allahabad Pillar Inscription mentions such weapons of war as battle-axe, arrow, spear, pike, barbed dart, sword, lance and javelin etc.[10] The Science of Archery has been referred to in the Mandasor Stone Inscription of Kumāragupta and Bandhuvarman.[11] Our coins depict some of the above mentioned weapons, as well as a few others.

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1. Munshi, K M , *The Saga of Indian Sculpture*. pl. 17b; *Kandariyā Mahādeva Temple*, Khajurāho, Entrance to Cella ; *Lakshmana Temple*, Khajuraho, right out facade.
2. *Bṛihatsaṁhitā*, op. cit., 72/3, p. 457.
3. Cf. *Antiquities of Orissa*. op. cit., p. 325.
4. Bhārata Kalā Bhavana Coll., *JNSI*, XVIII, pt. I. p. 52.
5. *BHC*, pl. XVIII. 11 ; Prince of Wales Mus. Coll., *JNSI*, XI, pl. I. 12.
6. *BHC*, pl. XVIII. 11.
7. *Ajantā*, I, pl. XII.
8. A Palace Scene in Ajantā, Cave XVII.
9. Varāhamihira dwells upon the merits of betel leaf (*tāmbūla*), by describing that it arouses *kāma*, increases beauty and strength, brings about fortune, cures several ailments and gives fragrance to the mouth and so on (*Bṛihatsaṁhitā*, op cit., 77/35, p. 475)
10. Fleet, op. cit., No. 1, pp. 6-7, 12.
11. Ibid., No. 18, p. 85.

BOW AND ARROW

The depiction of bow and arrow on the coins outnumbers that of any other weapon.[1] The bows are of two types. One consisted of two semi-circular pieces joined by a spare piece of wood or metal, the other had a single semi-circle. In the former the joining piece of two semi-circular pieces was sometimes straight (Fig. 76)[2] and sometimes slightly curved (Fig. 77).[3] Sometimes there was a ring (?) in the centre which facilitated the grip (Fig. 78).[4] Some had curved grip, but with two guards to avoid slip (Fig. 79).[5] Some bows had an inward bulge in the middle, so that their shape includes segments of three circles (Fig. 80)[6]. In some cases, the two extremes between which the string or *jyā dandha*[7] was fastened

1. Bow and arrow has been depicted on these coin types: Archer type of Samudragupta (*BMCGD*, pl. IV. 1-7), Archer (*BMCGD*, pls. VI. 1-18, VII. 1-19; *BHC*, pls. VII. 12-14, VIII. 1-15, IX. 1-15, X. 1-15, XI. 1-15, XII. 1-5; *JNSI*, Vol. XI, pl. I. 11), Lion-slayer types (*BMCGD*, pls. VIII. 11-17, IX. 1-12; *BHC*, pls. XVI. 8-15, XVII. 1-15, XVIII. 1-10) of Chandragupta II, Archer (*BMCGD*, pl. XII. 1-12; *BHC*, pls. XIX. 1-15, XX. 1-15, XXI. 1-5), Tiger-slayer (*BMCGD*, pl XV. 1-4; *BHC*, pl. XXVII. 1-15) and Lion-slayer (*BMCGD*, pl. IV. 1-17; *BHC*, pls. XXVIII. 1-15, XXIX. 1-15) types of Kumāragupta I, Archer type of Skandagupta (*BMCGD*, pls. XIX. 1-5, 10-15, XX. 1-2; *BHC*, pl. XXXII. 1-3), Ghatotkachagupta (*BMCGD*, pl. XXIV. 3; *BHC*, pl. XXXII. 4), Narasinghagupta (*BMCGD*, pl. XXII. 7-12; *BHC*, pl. XXXII. 5), Kumāragupta II (*BMCGD*, pls. XXII. 13-15, XXIII. 1-5; *BHC*, pl. XXXII. 6), Budhagupta (*BHC*, pl. XXXII. 7), Vishnugupta (*BMCGD*, pl. XXXIII. 9-13, *BHC*, pl. XXXII. 8), Vainyagupta (*BMCGD*, pl. XXXIII. 6-8; *BHC*, pl. XXXII. 9) and Jayagupta (*BHC*, pl. XXXII. 10). The bows have been depicted on the Horseman type also of different kings, but here they are only partially visible.

2. *BMCGD*, pls. VI. 6-4, 7, 16, XII. 1-2, 6; *BHC*, pls. VI. 2, VII. 12-14, VIII. 1-2, 9-15, XXI. 4.

3. *BMCGD*, pls. VI. 10 (Lucknow Museum Specimen), 12, VII. 1-2, IX. 11-12; *BHC*, pls. V. 15, VI. 1, VIII. 7-8; Bamnal Hoard, *JNSI*, V, pl. IX. B 11.

4. *BMCGD*, pls. VI. 13, 18, VII. 7, XXIII. 2-3; *BHC*, pls. XI. 12, XII. 5; *JUPHS*, V, pt. II, pl. IV. B. 1.

5. *BMCGD*, pl. XXII. 7, 9; *BHC*, pls. X. 10, XXI. 5, XXXIII. 5-6.

6. *BHC*, pls. VIII. 6-8, X. 6-8.

7. *Śukranīti*, op. cit., p. 101.

were straight (Fig. 81)[1], while in others, they took a slight curve on the outer side (Fig. 82).[2] On certain specimens, the outer ends were segmented (Fig. 83),[3] partly to fasten the *jyabandha* tightly, and partly to make it look more beautiful. The single semi-circular bows (Fig. 84)[4] are quite rare on the coins, showing that their use was limited. For hard grip they had sometimes rings in the middle.[5]

When the archer stood on the ground, he usually held the bow with his left hand by the top end, with the other end resting on the ground, and the bow string being inwards. In some cases, the string is outwards, but the mode of holding the bow is the same.[6] On some very limited specimens, the king is holding the bow by top with the right hand, other things being as usual.[7] Sometimes he held the bow by the middle, and the string outwards.[8] In some cases, the bow has been held by the middle with left hand, but the string is inward.

While wielding, the bow was held in left hand, and the arrow was shot with the right.[9] On some specimens, where the archer is facing left, he is holding the bow in the right hand, and shooting by the left.[10] This is not the natural way of wielding this weapon and seems to be an oversight of the die-cutters This is also not correct to think that Gupta monarchs were ambidextrous archers,[11] because on the other specimens, the same king is wielding the weapon in a natural way. There may be a possibility that Gupta kings were so skilled in archery that they could shoot the arrow with any hand, with the same amount of

1. *BMCGD*, pls. IX. 12, XII. 7-8; *BHC*, pls. VII. 14, IX. 14, XVIII. 4-5, XIX. 9-13, XX. 5-7.
2. *BMCGD*, pls. IX. 7, 9, XV. 3; *BHC*, pls. XVII. 2, 6, XIX. 7; Bamnal Hoard, *JNSI*, V, pl. IX. B. 12.
3. *BMCGD*, pl. IX. 9.
4. *BMCGD*, pls. VI. 5, XII. 10-12; *BHC*, pl. IX. 5.
5. *BMCGD*, pl. XII. 12.
6. *BHC*, pl. IX. 2.
7. *BMCGD*, pl. VII. 19; *BHC*, pl. XII. 11-12; *JASB*, 1884, pl. III. 3; *JRAS*, 1889, pl. II. 1.
8. *BMCGD*, pl. VI. 5-6, *BHC*, pls. IX. 3-4, XIII. 3-5, XIX. 6-15; *JASB*, 1884, pl II. 14; *JRAS*, 1889, pl. I. 14.
9. Cf. *Agnipurāna* (Ed. M. N. Dutta), Vol. II, p. 896.
10. *IMC*, pl. XVI. 4; *BMCGD*, pls. II. 14-15, VIII. 13, IX. 3-6, XIV. 15-17, XV. 1-4; *BHC*, pls. XVI. 8-13, XVII. 11-14, XXVII. 7-15.
11. *BHC*, Intro. LXXXVI.

efficiency. Kālidāsa too has mentioned that a skilled archer could shoot the arrow with his left hand also.[1]

The manner of drawing the bow can be seen on the hunting series of coins. The bow was invariably held vertical, and the string was drawn upto the ear (*ākarṇa*).[2] There is no evidence to show that the bow was held horizontal to the ground. Similarly there is no specimen to reveal that the lower end rested on the ground when the weapon was being used.

The arrows on the coins appear to have feathers at their lower extremities (Fig. 85).[3] The arrow-tips are of the shape of small spear-heads, usually barbed with two cutting edges (Fig. 86).[4] According to the references in Kālidāsa the arrows had iron-point[5], and feathered ends[6], in order that they might dart swiftly. The feathers of herons and peacocks were used for this purpose. The arrow-heads were extremely sharp and hard.[7]

Among all the weapons, bow and arrow held supreme position in ancient times. *Agnipurāṇa* describes that the battle fought with bow and arrow should be considered as the most honourable sort of fight. After that came in order of merit, those fought with nooses and swords etc.[8]

QUIVER

The arrows were kept in the quivers[9], but they are not visible on the coins. The reason probably is that they were slung at the back[10], hence they did not attract the attention of die-cutters, who depicted the archer generally facing front. Only on some rare specimens of Archer type of Chandragupta II, the king is drawing with right hand an arrow from a quiver

1. Upadhyay, B. S., *India in Kālidāsa*, p. 165.
2. *IMC*, pl. XVI. 4, 6; *BMCGD*, pls. VIII. 14-15, IX. 2, 5, XIV. 1-8, 14-17, XV. 1-4; *BHC*, pls. XVI. 12-13, XXVII. 1-5, 12-15; *JASB*, 1884, pl. IV. 32; *JRAS*, 1889, pl. III. 5; Cf. *Raghuvaṁśa*, VII. 57.
3. *BMCGD*, pls. VII. 10, XXII. 9, 12, XXIII. 8; *BHC*, pl. XII. 2; *JNSI*, XI, pl. I. 11.
4. *BMCGD*, pl. IX. 11; *BHC*, pls. VI. 2, VII. 14, XIII. 2, XXXII. 5.
5. *Raghuvaṁśa*, V. 55.
6. Ibid.
7. '*niśitanipātā vajrasārāḥ śarāstē*', *Śākuntala*, op. cit., I. 11, p. 21.
8. *Agnipurāṇa*, op. cit., CCXLIX. 6-7, p. 894.
9. Cf. *Raghuvaṁśa*, II. 30.
10. Cf. *Antiquities of Orissa*, op. cit., p. 353.

which takes the position of altar of earlier Standard type of coins. The quiver is standing on the ground, and about half a dozen arrows are peeping out of it (Fig. 72)[1]. It is elongated with a taper towards the bottom which ends in a round knob. Above this knob, and below the rim, there is a ring which encircles the quiver. An almost similar type of quiver (Fig. 73)[2] has been depicted in Ajantā.

SPEAR AND JAVELIN

These weapons were variously known as *bhalla*,[3] *śūla*,[4] and *śakti*[5] etc. Numismatists have largely differed regarding the identity of spear-like object depicted on Gupta coins. Smith, on the coins of Samudragupta, took it to be a javelin,[6] but later he recognised it as a spear.[7] According to Allan, it was a standard, and therefore, he named the coin-type as 'Standard type'.[8] Recently some scholars have preferred to identify it with *rājadaṇḍa*.[9] In spite of such diverse opinions, this much is certain that on some coins of Standard type, the object of our discussion does appear like a spear or javelin.[10] Besides this, the spear or *śakti* has been shown in the left hand of Kārttikeya on the reverse of Peacock

1. *Num. Chron.*, 1910, pl. XIV. 2; *LMC*, No. 48, p. 13 (*BMGD*, pl. VI. 10); *BMGD*, pl. VI. 11-12; *JNSI*, XIX, pt. II, pl. II. 5.

   The coin was first published by R. Burn, who described the object on right as an altar (*Num. Chron.*, 1910, p. 399). Later Allan identified it with quiver, full of arrows (*BMGD*, Intro. LXXIX). Altekar also agreed with Allan (*The Coinage of Gupta Empire*, p 97). The position of the quiver on the right is rather unusual. Probably the artist did not like to do away with the tradition of earlier type of coins with altar on right. Hence, in place of altar, he depicted quiver, exactly at the same place where the altar used to be. Quiver is a befitting combination with the bow which the king holds in his left hand.

2. Ajantā, Cave No. XVII.
3. *Raghuvaṁśa*, IX. 66.
4. Ibid., XV. 5.
5. Ibid., XII. 77.
6. *JRAS*, 1889, p. 68.
7. *IMC*, p. 102.
8. *BMGD*, Intro., p. LXIX.
9. *JNSI*, IX, p. 146, n. 1; Ibid., XI, pp. 25-26.
10. *BMGD*, pl. I. 3-4, 8; *BMC*, pl. II. 1, 7; *JASB*, 1884, pl. II. 3; *JRAS*, 1889, pl. I. 7.

type of Kumāragupta I.[1] The above mentioned coins reveal that the following types of spears and javelins were in vogue:

1. Spears with shafts slightly tapering towards the top, and the spear-head resembling a long leaf with a medial rib (Fig. 87).[2]

2. Spears with shafts as above, except, that a ring near the lower end is also visible. The head has a pointed end with two corners on either side (Fig. 88).[3]

3. Spears with leaf-shaped blade, medial rib, blunt point and a ring at the junction of the blade and the shaft (Fig. 89).[4]

4. Spears with a broad leaf-shaped blade narrowed in the middle, medial rib and ring (Fig. 90).[5] Such spears are found in the hand of Kārttikeya in the Gupta sculptures also.[6]

5. Spears with two blades, one after another, the top one resembling the leaf of a *pippal* tree, with or without a ring at the junction of blade and shaft (Fig. 91).[7]

6. Spears with point resembling an arrow-head (Figs. 92, 93)[8], and the other extreme ending in a knob. These spears appear to be heavy ones. The weapon was probably thrown as a javelin which is evident from the knob on the other end, which was obviously intended to balance the weapon. This has been held in the hand with the point resting on the earth.

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1. *BMCGD*, pl. XV. 5-14; *BHC*, pl XXVI. 1-13; *JASB*, 1884, pl. IV. 1-2; Ibid., (Barsara Hoard), 1852, pl. XII. 7; *JRAS*, 1889, pl. III. 1-2; Ibid, 1893, pl. III. 8-9; *LMC*, Nos. 117-18, pp. 30-31; *JNSI*, XI, pl. I. 13.
2. *BMCGD*, pl. I. 3.
3. *BMCGD*, pl. I. 8; *JASB*, 1884, pl. II. 3; *JRAS*, 1889, pl. I. 7.
4. *BHC*, pl. XXVI. 5.
5. *BHC*, pl. XXVI. 7, 12; *BMCGD*, pl. XV. 14.
6. Cf. *The Saga of Indian Sculpture*, pl. 42; Bhārata Kalā Bhavana, Ex. No. 157.
7. *BHC*, pl. XXVI. 1; *JNSI*, XI, pl. I. 13; *BMCGD*, pl. XV. 5, 8.
8. *BHC*, pl. III. 11, 13.

   Dr. Altekar describes this object as a standard having a 'thick flat top like a sceptre' (*BHC*, No. 150, p. 37), but the point resembling an arrow-head is quite distinct on the lower extremity. The length of the shaft brings it into the category of spear or javelin instead of an arrow.

The point of a javelin is always kept downwards while hurling the weapon. Some spears have pennons tied in the middle of the shaft.

BATTLE-AXE (*paraśu*)[1]

The battle-axe or *paraśu* has been depicted in the left hand of Samudragupta, on the coins of Battle-axe type.[2] It consisted of a long shaft, almost equal to the standing figure and a battle-axe attached to it in the middle. It had two rings or knobs, one at each extreme of the shaft.[3] The semi-circular blade of the axe differed in shape, as shown in the figures 94[4], 95[5], 96[6] and 97[7].

Battle-axe was a deadly weapon in ancient India. It was fully used in battlefields and created havoc in the enemies. The circular legend on the obverse of Battle-axe type of Samudragupta describes that 'wielding the battle-axe of *kṛitānta*, the unconquered conquerer of (till then) unconquered kings is victorious'[8]

SWORD

Swords have been depicted on some varieties of Horseman type[9], the coins of *Chhatra* type[10], *Chakravikrama* type[11] of

1. Alld. Pillar Ins. (Fleet, op. cit., No. 1, pp. 6-7); *Raghuvaṁśa*, XI. 78.
2. *BMCGD*, pl. IV. 8-16; *BHC*, pl. V. 6-14; *Num. Chron.*, 1910, pl. XIV. 1; *JNSI* (Poddar Collection), XIV, pl. VI. 11.
3. *BMCGD*, pl. IV. 12, 14
4. *BMCGD*, pl. IV. 14; *BHC*, pl. V. 13.
5. *BHC*, pl. V. 6.
6. Ibid., pl. V. 14; *BMCGD*, pl. IV. 13.
7. *BHC*, pl. V. 11.
8. '*Kṛitāntaparaśurjayatyajitarājatājitaḥ*', *The Coinage of Gupta Empire*, p. 58.
9. *BMCGD*, pls. IX. 15-17, X. 6-7; *BHC*, pls. XIII. 13-15, XIV. 1-2; *Num. Chron.*, 1910, pl. XIV 4; Ibid., 1891, pl. II. 5.
10. *IMC*, pl. XVI. 1; *BMCGD*, pl. VIII. 1-9; *BHC*, pl. XV. 4-15, XVI. 1-7; *JASB*, 1884, pl. III. 8; *JRAS*, 1889, pl. II. 7-8; *JNSI*, XI, [p. 32, pl. III. 8; Ibid., XIV, pl. VI. 15.
11. *BHC*, pl. XVIII. 14.

Chandragupta II, Swordsman[1], Horseman[2], and Rhinoceros-slayer[3] types of Chandragupta I.

The following type of swords are found on the aforesaid coins :

1. Long straight swords with pointed ends. The handle consisted of a simple pommel, grip, and quillon. There is no guard (fig. 98)[4]. They were essentially thrust-swords.

2. Straight swords with crescent-shaped quillon which served as a guard for the grip (Fig. 99)[5].

3. Short double-edged swords with pommel and quillon as usual. Fuller runs throughout the length. It must have given sufficient strength to the weapon. The point is blunt (Fig. 100[6]). They appear to have been cut-swords.

4. Swords with a slight curve near the pointed end; other things were as usual (Fig. 101).[7]

The swords used to hang down, through a leather belt on the left side of the swordsmen.[8] On a few coins, they have been shown as hanging on the right side also.[9] The swords were kept in scabbards which were sometimes decorated (Fig. 101).[10] The scabbards on most of the coins are either indistinct or absent.

DAGGER

The depiction of daggers on Gupta coins is very rare. Only on the Elephant-rider-lion-slayer type of Kumāragupta, the king has been shown as holding a dagger in the posture of attack,[11] in his right hand. The daggers were used

1. *IMC*, pl. XVI. 2; *BMCGD*, pl. XII. 15-18; *BHC*, pl. XXI. 6-15.
2. *BMCGD*, pl. XIII. 15-19; *BHC*, pls. XXIV. 2-15, XXV. 11-15; *JRAS*, 1889, pl. II. 14; *Num. Chron.*, 1910, pl. XIV. 16.
3. *BHC*, pl. XXX. 5-8; *JNSI* (Luck. Mus. Coll.), XI, p. 7, pl. III. 7.
4. *BMCGD*, pl. VIII. 1, 15; *BHC*, pls. XV. 4, 6, 8, XXX. 5-8.
5. *BHC*, pl. XXV. 11-15.
6. *BMCGD*, pl. VIII. 8.
7. *BMCGD*, pl. XIII. 16-19; *BHC*, pl. XXIV. 2, 4, 7, 12-13.
8. *BMCGD* pl. IX. 15-17; *BHC*, pls. XIII. 13-15, XV. 4-15; *Num. Chron.*, 1891, pl. II. 5; *JNSI*, XI, pl. III. 8.
9. *BHC*, pl. XXV. 11-15.
10. *BMCGD*, pl. XIII. 16-19; *BHC*, pl. XXIV. 2-15.
11. *BHC*, p. 294, pl. XXX. 1-4.

in the time of emergency. In the present scene, probably the lion has suddenly attacked the king, who is riding on an elephant, and for his defence he is using the dagger. It is not possible to tell anything about the shape of the dagger, because their depiction is not clear on the coins.

GOAD

The goad or *aṅkuśa* has been depicted on the coins of Elephant-rider type of Kumāragupta I. The king himself is driving the elephant with goad in his right hand. The goad is just like its modern counterpart (Fig. 102)[1]. The hook of the goad was probably made of iron which was socketed in a small *daṇḍa* of wood.[2]

MACE

The mace has been depicted on the *Chakravikrama* type of coins of Chandragupta II.[3] It has been shown as an attribute in the left hand of *Chakrapurusha*[4]—the personification of the *Sudarśana Chakra* of Vishṇu. The mace depicted, is a simple one, consisting of a short rod, mounted with thick knob at one end. It was a war weapon in ancient India. According to Kauṭilya, it could be hurled on the enemy[5], though usually it was taken to be a weapon of non-missile class[6].

NOOSE

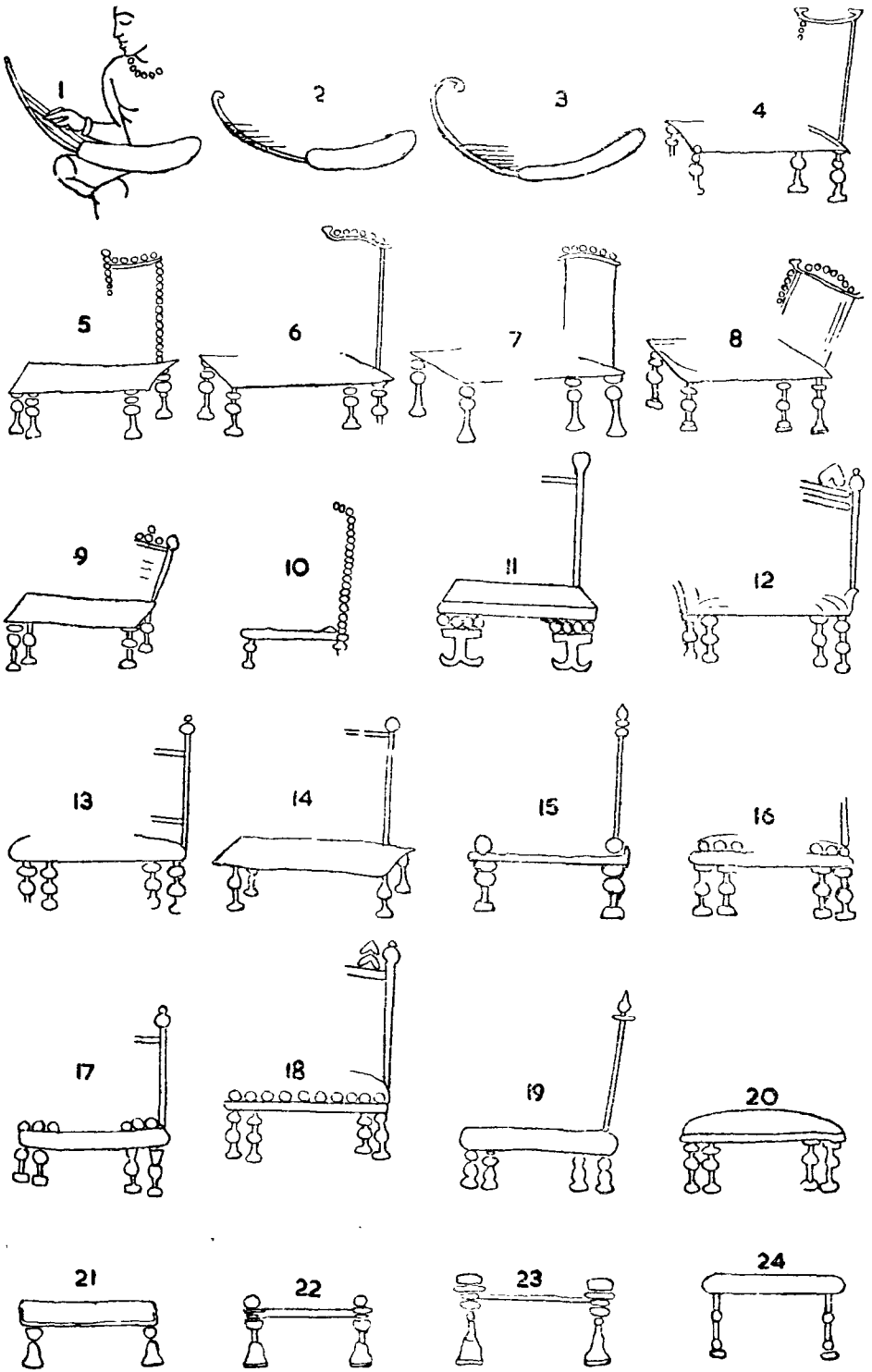
The noose or *pāśa* has been shown only in the hands of goddesses as their attribute. It was an important offensive weapon of ancient time. The coins depict it as a long rope with knotted ends, and a large loop in the middle[7] On certain specimens, the loop is not in the middle, but it is on one end.[8] *Pāśa* was made of such materials as hemp, flax, *muñjā* grass, *bhaṅga* (Crotalarea Juncea), or *snāyu* etc. and was ten cubits long.[9] Its loop on one end had the diameter of one cubit.[10]

1. *BHC*, pl. XXXI. 1-3.
2. Cf. *Bṛihatsaṁhitā*, op. cit. 72/4, p. 457.
3. *BHC*, pl. XVIII. 14 ; *JNSI*, XII, pl. VII. 8.
4. *JNSI*, XIII, p. 180 ; Ibid., XVI, p. 97. Dr. Altekar had earlier identified the figure with Vishṇu himself (Cf. *BHC*, Intro. XCII).
5. *Arthaśāstra*, II. 18.
6. Cf. *Raghuvaṁśa*, VII. 52.
7. *BMCGD*, pls. IV. 1, V. 2, VI. 16, IX. 11-13 ; *BHC*, pls. I. 7, 13, II. 3, VI. 5, VII. 11, IX. 6, X. 11, XII. 11, XV. 7.
8. *Num. Chron.*, 1910, pl. XIV. 5 ; Cf. *BMCGD*, pl. X. 7.
9. Cf. *Agnipurāṇa*, quoted in *Antiquities of Orissa*, op. cit., p. 359
10. Ibid.

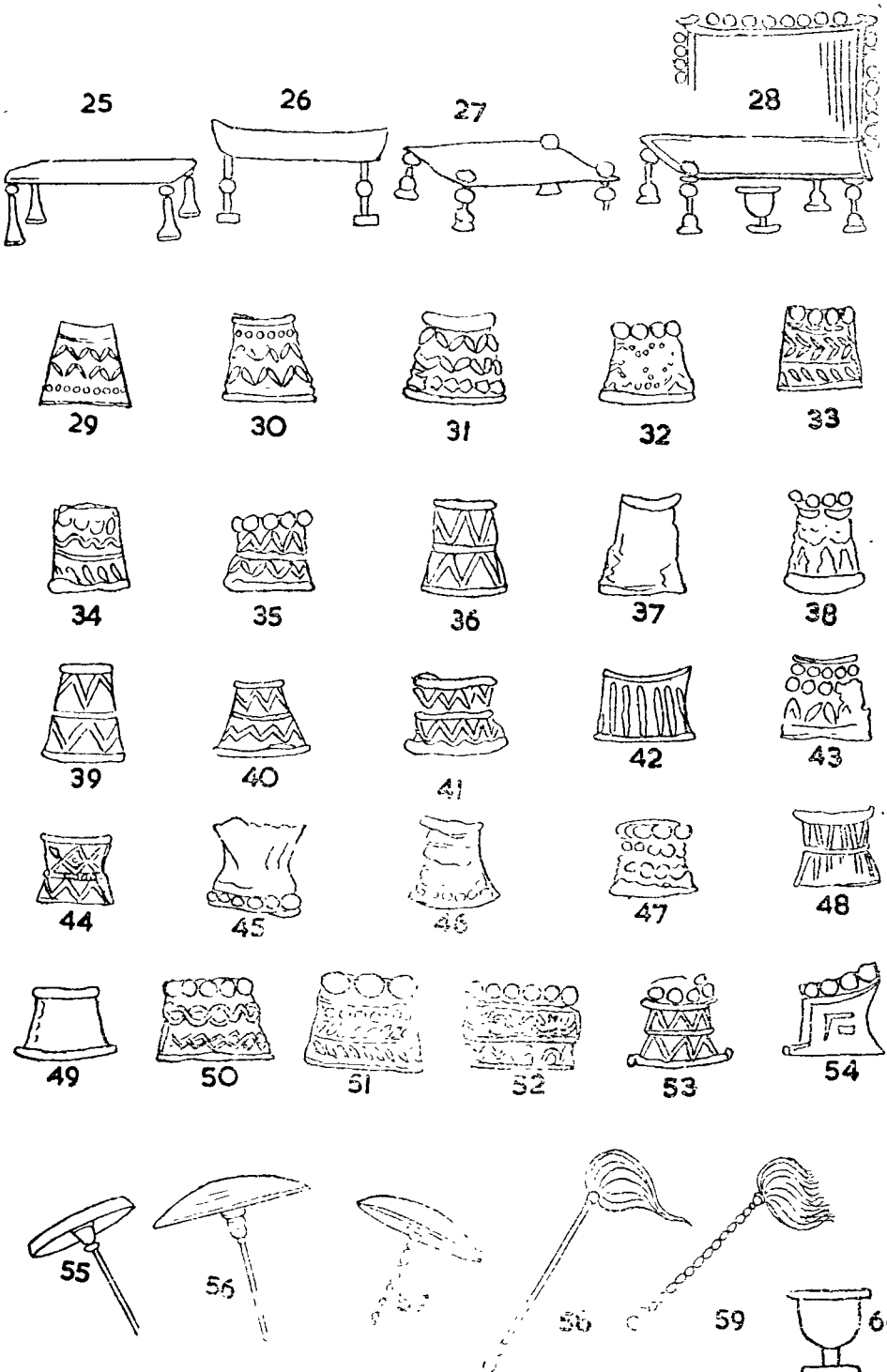
SHIELD

Among defensive weapons the shield figures on the Apratigha type of coins of Kumāragupta I[1], in the left hand of the male figure standing on the extreme left in the group. The depiction of the shield is not clear, but it appears that the one held by the figure is rectangular. It has been held vertical.

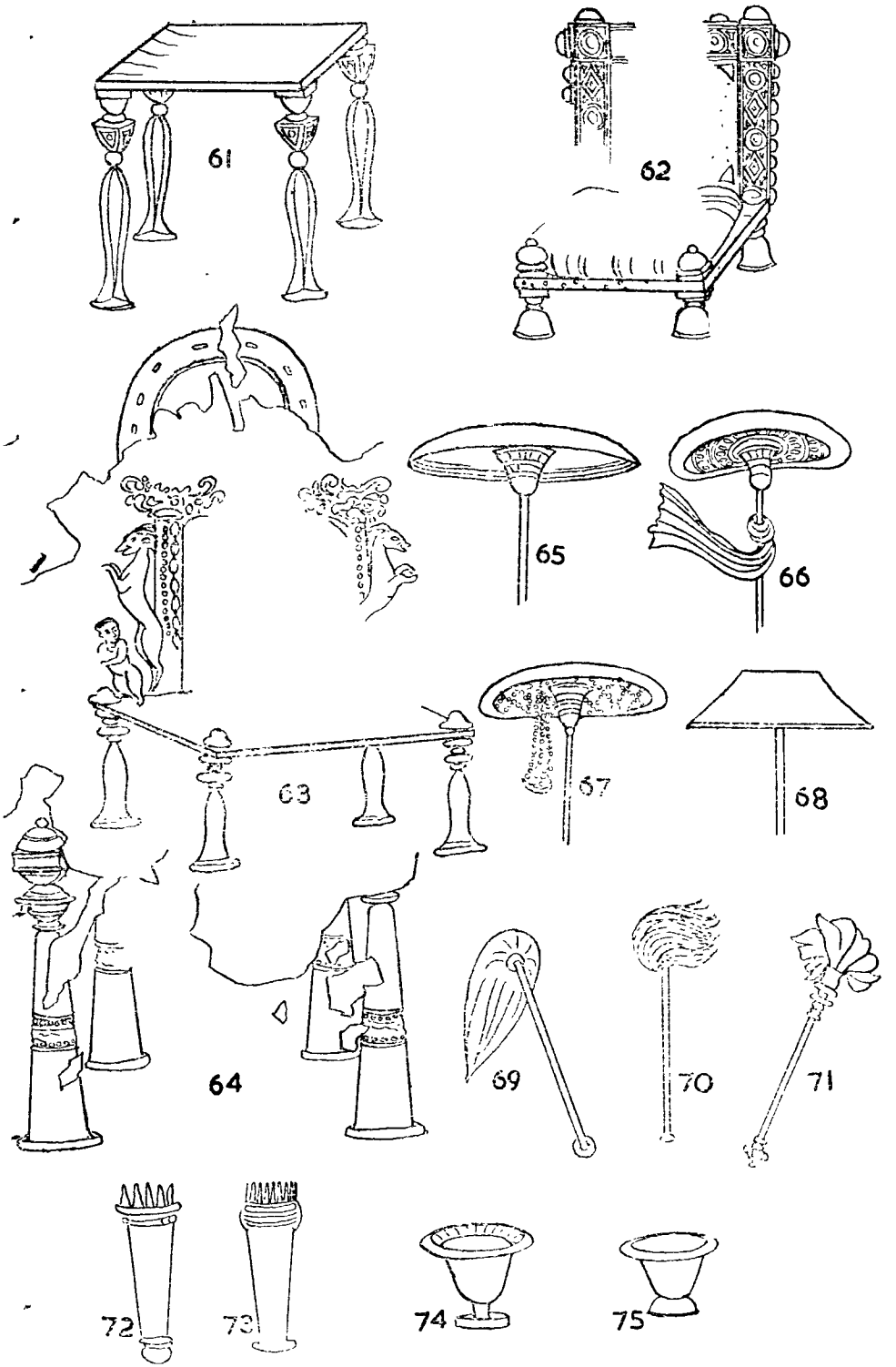
1. *BMC*, pl. XXXI. 6-13 ; *JNSI*, XII, pl. VII. 1-4.



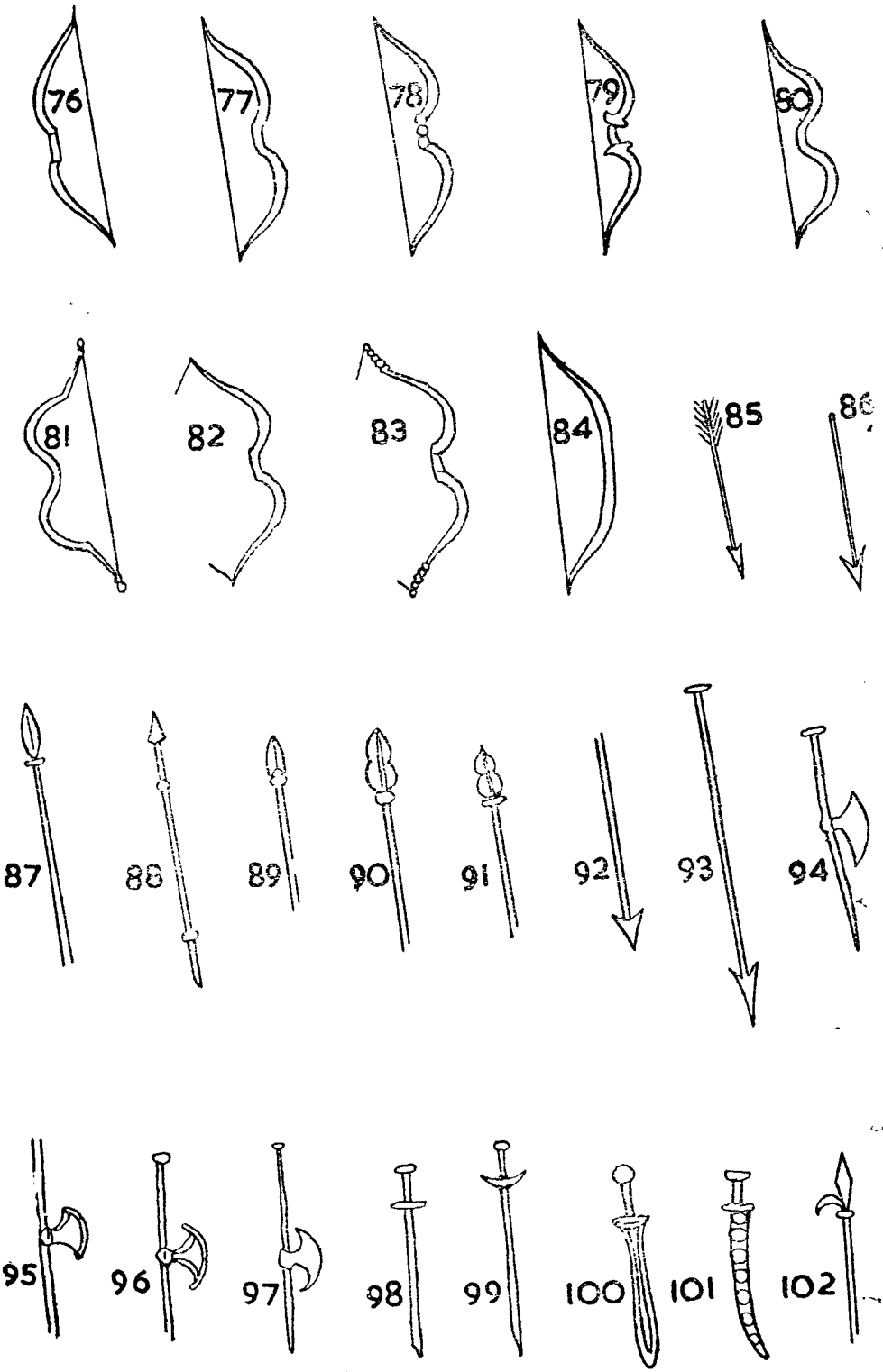
Vīṇās and Thrones



Furnitures and Other Household Materials



Furnitures, Other Household Materials and Quivers



Weapons of War

THE ISSUE OF PUNCH-MARKED COINS

D. C. SIRCAR

It is admitted that the different symbols on the punch-marked silver coins, known in ancient India as *purāṇa, dharaṇa* or *raupyakārshāpaṇa* and weighing 32 *rattis* (a little over 146 grains) theoretically, were stamped by means of separate punches and not by a single die. But there is difference of opinion among scholars as to whether the symbols were punched all at the same time by the issuing authority or by different people at different dates. V. A. Smith thought that 'the numerous obverse punches seem to have been impressed by the different moneyers through whose hands the pieces passed, and the reverse marks may be regarded as the signs of approval by the controlling authority'.[1] But the same grouping of the symbols noticed on a large number of coins from a single hoard, as pointed out by other writers, proves that generally they were stamped on the coins at the same time by the issuing authority.[2] This problem has thus been solved satisfactorily.

Another difference of opinion relates to the question as to who issued the punch-marked coins. Smith observed that 'the punch-marked coinage was a private coinage issued by guilds and silver-smiths with the permission of the ruling authority'.[3] But, after systematic studies of the coin-hoards of definitely known provenance, D. B. Spooner, D. R. Bhandarkar and E.J. Walsh suggested that the punch-marked coins were issued by a central authority, i.e. the State.[4] Among later writers commenting on Smith's views, J. N. Banerjea says, "There is little doubt that the marks were those of a central authority that guaranteed the genuineness of the metal and the correctness of the weight".[5] S. K. Cakrabortty says that practically all or the majority of the coins examined by Smith are surely State issues; but, at the same time, he also maintains that originally the punch-marked coins were being issued by private bankers whose

1. *IMC*, I, p. 133.
2. Cf. Allan, *BMC*, *Anc. Ind.*, p. xix; etc.
3. loc cit.
4. See Spooner in *ASI, AR*, 1905-6, p. 153; Bhandarkar in *Carm. Lect.*, 1921, pp. 98 99; Walsh in *MASI*, No. 19; *JRAS*, Suppl., October 1924, p. 175; etc.
5. *Comp. Hist. Ind.*, II, ed. Sastri, p. 777.

symbols have not yet been recognised by scholars owing to insufficient study and to the fact that the private issues were mostly called back and given new impress when the State entered into the field.[1]

In our opinion, three is some evidence to show that all punch-marked coins were not issued by the State, that some of them were certainly 'issued by guilds and silversmiths' as Smith suggested and that such coins were in circulation side by side with those issued by the States. The evidence is primarily supplied by a passage in Buddhaghosha's *Visuddhimagga* composed in the 5th century A. D. and it has been known to the students of Indian numismatics for about half a century now.[2] The belief regarding 'the absence of information from literary sources' on the punch-marked coins, as expressed in Allan's *Catalogue* published in 1936 and referred to above, does not appear to be fully justified.

The well-known *Visuddhimagga* passage runs as follows: *yathā hi heraññika-phalake ṭhapitaṁ kahāpaṇa-rāsiṁ eko ajāta-buddhi-dārako eko gāmika-puriso eko heraññiko ti tīsu janesu passamānesu ajāta-buddhi-dārako kahāpaṇānaṁ chittavichitta-dīgha-chaturassa-parimaṇḍala-bhāva-mattam=eva jānāti, idaṁ manussānaṁ upabhoga paribhogaṁ ratana-sammitaṁ ti na jānāti; gāmika-puriso chittavichitta-bhāvaṁ jānāti idaṁ manussānaṁ upabhoga-paribhogaṁ ratana sammitaṁ ti cha, ayaṁ chheko ayaṁ kūṭo ayaṁ addha-sāro ti idaṁ pana vibhāyaṁ na jānāti; heraññiko sabbe pi te pakāre jānāti, jānanto cha kahāpaṇaṁ oloketvā pī jānāti, ākoṭitasaddaṁ sutvā pi gandhaṁ ghāyitva pi rasaṁ sāyitvā pi hatthe dhārayitvā pi amukasmiṁ nāma gāme vā nagare vā pabbate vā nadī-tīre vā kato ti pi amuk-āchariyena kato ti pi jānāti.*

The passage clearly describes how a hoard of *kārshāpaṇas* lying on a goldsmith's or money-changer's tray would strike a child, a rustic and another goldsmith or money-changer. The child would know only that the coins have many symbols on them and are oblong, square or round, but not that they could be used like gems for our enjoyment. The rustic would know all what the child knows and also that the coins could be used by us for enjoyment like gems; but he would not know the difference among them, e.g., which is genuine, which is a forgery and which is now half its

1. *Anc. Ind. Num.*, pp. 129-30.
2. Cf. D. R. Bhandarkar in *ASI, AR*, 1913-14, p. 226; *Carm. Lect*, 1921. pp. 99-100; see also *JNSI*, XIII, pp. 183 ff.

original value. But the goldsmith or money-changer would not only know all that is known to the child and the rustic but much more than that. After looking at the coins and examining them in various ways such as hearing the sound they make when struck, smelling and licking them and taking them in his hand, he would understand which *āchārya* made them and at which village, town, hill or river-bank they were made. The word *āchārya* has been used here in the sense of 'a master goldsmith'.[1]

The passage makes it abundantly clear that the symbols on the *kārshāpaṇas* or punch-marked coins only indicated the place wherein a particular piece was made and the goldsmith who made it. Apparently, none of the symbols indicated the State in which it was made or by which it was issued. If there was any such symbol, that would have naturally been regarded as far more important than the others and Buddhaghosha could have hardly failed to mention it. Thus the manufacture of the *kārshāpaṇas*, referred to in the *Visuddhimagga* passage, was not directly associated with the State. Of course whether the goldsmith manufactured them with the State's permission is not known from it. The minting of coins from villages is also an interesting information supplied by the passage.

There is another passage in Buddhaghosha's *Samantapāsādikā*, which runs as follows: *tadā Rājagahe vīsati-māsako kahāpaṇo hoti, tasmā pañcha-māsiko pādo; tena lakkhaṇena sabbajanapadesu kahāpaṇassa chatuttha-bhājo pādo ti veditabbo; so cha kho porāṇassa nīla-kahāpaṇassa vasena, na itaresaṁ rudradāmakādīnaṁ.*[2] It means to say that the weight of the *kārshāpaṇa* was 20 *māshakas* at Rājagṛiha so that its quarter weighed 5 *māshakas* and that, likewise, the quarter of a *kārshāpaṇa* was known as *pāda* in other territories also, though this was true only with reference to the old-type blue *kārshāpaṇa* and not to other new *kārshāpaṇas* like the *rudradāmaka*, i. e. the silver coins of about 36 grains issued by Rudradāman I (C. 130-55 A.D.) and other Śaka kings of Western India. Apparently there was no coin equivalent to $\frac{1}{4}$ of the *rudradāmaka-kārshāpaṇa*.

The above *Samantapāsādikā* passage shows that the punch-marked coins, here called 'the old-type blue *kārshāpaṇa*',

1. Cf. *P. T. S. Pali-Eng. Dict.*, s. v. *āchariya*. Buddhaghosha being a South Indian (cf. *The Classical Age*, ed. Majumdar, p. 395), it is interesting to note that the word is used in the sense of 'an artisan' (a goldsmith, mason, carpenter, etc.) in the South Indian languages.
2. See *JNSI*, XIII, p. 188.

were in circulation as late as the 5th century when Buddhaghosha flourished and also that they were current side by side with State issues like the silver coins of the Śakas of Western India. It is also clear that the Śaka coins remained in circulation centuries after their issue.

Later commentators[1] bring out the difference between the old-type blue *kārshāpaṇa* and the new *kārshāpaṇā* called *rudradāmaka* and state that the latter was $\frac{3}{4}$ of the former in value. According to one commentator, the old-type blue *kārshāpaṇa* was made by stamping symbols on them in accordance with the *paurāṇa-śāstra*, i. e. a book dealing with the *purāṇa* coin such as the *Rūpasūtra*[2] (*porāṇa-satth-ānurūpa-lakkhaṇa sampannā uppāditā*). Another commentator says that the old-type *kārshāpaṇas* were made in accordance with the *paurāṇa-śāstra* by impressing symbols on them and that they resembled the blue *kārshāpaṇa* (*porāṇa-satth-ānurūpa-uppāditassa lakkhaṇa-sampannassa nīla-kahāpaṇa-sadisassa kahāpaṇassa*). These passages show that the punch-marked coins were manufactured as late as the 5th century, if not also later, long after the other types of coins, sometimes bearing names of kings who issued them, appeared in the field. There is little doubt that the old-type *kārshāpaṇas* are the same coins as mentioned in the *Visuddhimagga* apparently as private issues.

The question now is whether a king would like to issue punch-marked coins anonymously in the 5th century or later when coins bearing the kings' names began to be used in various parts of the country from before the beginning of the Christian era. It is difficult to answer the question. But we consider it unlikely that the Sātavāhana kings issued coins of their usual types only in cheap metals like copper, lead and potin, but, at the same time, also the punch-marked coins in silver. If, therefore, the punch-marked coins were in circulation during the Sātavāhana age, as they apparently were since that age was earlier than the days of Buddhaghosha, they were probably private issues.

The *Suttavibhaṅga* section of the *Vinayapiṭaka* mentions *kārshāpaṇa* along with the *lauha-māshaka*, *jatu-māshaka* and *dāru-māshaka* coins and Buddhaghosha's *Samantapāsādikā* explains the second and third respectively as (1) those made of bits of wood and bamboo and pieces of palmyra leaves on

1. Cf. *JNSI*, XIII, pp. 188-90.
2. Cf. Bhandarkar, *Carm. Lect.*, 1921, p. 126. According to Budhaghosha, while learning the *Rūpasutta*, one had to turn over and over many *kārshāpaṇas* and look at them.

which figures were cut in (*sāra-dāruṇā vā veḷu-pesikāya vā anta-maso tāḷa-paṇṇena pi rūpaṁ chhinditvā kata-māsako*), and (2) those made of a quantity of lac or gum with the impression of figures (*lākhāya vā niyyāsena vā rūpaṁ samuṭṭhāpetvā kata-māsako*).[1] It is doubtful whether the State issued coins of such flimsy material.

We have some copper coins bearing the names of certain localities like Tripurī, Ujjayinī, Kauśāmbī and Vārāṇasī[2] and it is hardly possible to prove that they were not issued by local bodies pertaining to the places in question. The same is the case with similar coins bearing the word *negamā* (Sanskrit *naigamāḥ*) meaning 'traders' or 'members of an administrative board pertaining to a town'[3]. Lumps of copper, known as the *ḍhabuā* coin, were not State issues.[4]

But the question is not of the private minting of coins of cheap material. Minting of coins in ancient India does not appear to have been different from that in the dominions of the Peshwas. We are told that "in the times of the Peshwas, coinage was not a monopoly, either private or governmental. Not a few people were apparently licensed to mint coins which naturally varied in their weight, purity and types from place to place. No wonder then that there were a plethora of coins of various sorts. Even in a single town, various kinds of coins were in circulation. Obviously these were exchanged at a rate which varied according to the metal used in the coins."[5] It is well known that, in the late medieval period, coins of various ages and countries passed as currency in the Indian market.[6] That the same position held good in the early period also is proved by available evidence. The currency of the old *rudradāmaka* coins in Buddhaghosha's age, as referred to above, of the silver coins of Kalachuri Kṛishṇa of the 6th century even in the 8th century[7] and of early Roman coins in the markets especially of South India has to be remembered in this connection.[8] Under the circumstances, it is difficult to

1. See *JNSI*, XIII, p. 183.
2. Allan, op. cit., pp. 239, 262; *JNSI*, XI, pp. 9-10; XII, pp. 134-35; etc.
3. Cf. Allan, op. cit., p. cxxvi; *Ep. Ind.*, XXXV, p. 5.
4. Cf. *JNSI*, VI, pp. 55 ff.
5. Ibid., IX, p. 50; Cf. VII, pp. 78 ff.
6. Ibid., VII, pp. 87 ff.
7. Cf. *Ep. Ind.*, XXV, pp. 225 ff.; Bhandarkar's List, No. 1206; etc.
8. Cf. Brown, *The Coins of India*, p. 58.

believe that coins minted by anybody anywhere could have been effectively prevented from being circulated in the ancient Indian market. When punch-marked coins manufactured centuries ago were in circulation, it seems to us practically impossible to check additions to the old stock by guilds and silversmiths from time to time especially in view of the fact that the said coins were used all over India while the whole country was never under a single suzerain and that often there was no effective administration in many areas.

EARLY COINS FROM VIDIŚĀ IN THE RAIPUR MUSEUM

BALCHANDRA JAIN

In May 1958, 835 ancient Indian coins were purchased by me for the Mahant Ghasidas Memorial Museum, Raipur from a coin-collector of Vidiśā (Madhya Pradesh). The collection included silver and copper punch-marked, silver and copper early cast and uninscribed, and tribal coins of Eran and Ujjain along with those of Jishṇu, Rāmagupta, Western Kshatrapas and the Nāga kings of Padmāvatī. A number of them are of unpublished varieties. Out of them, important punch-marked, repoussé uninscribed cast coins and the coins of the city of Vidiśā are being published here.

I

Punch-Marked Coins

I. PUNCH-MARKED: SILVER (SINGLE SYMBOL).

1. No. 3064 Silver, Oblong, 12 mm., 9 mm., 16 grains.

Obv. Single symbol 

Rev. Blank.

Punch-marked coins of this type were published by Allan and Gupta. It weighs a little more than a *Pāda-Kārshāpaṇa* of 8 *ratiis* (14.4 grains). This and No. 3065 of our collection, which is square in shape and weighs 13 grains, represent the *Pāda-Kārshāpaṇa* silver currency. The second coin is of copper but has traces of silver coating.

2. Nos. 3061 to 3063.

Silver : First coin is square, the rest two oblong; measurment 11 mm., 13 mm., X 8 mm., and 11 mm. X 9 mm. respectively; weight 11, 12 and 16 grains respectively.

Obv. Single symbol 

Rev. Blank.
A new variety.

3. No. 3060.
Silver, Hexagonal, 17 grains.

Obv. Single symbol 

Rev. Blank.
A new variety.

II. PUNCH-MARKED : COPPER.

4. Nos. 2978 to 3021.

Copper, Square, oblong and rect., from 9 mm. to 10 mm. X 14 mm. Varying in weight from 14 to 37 grains.

Obv. (1) The Sun, (2) *Shaḍarachakra*, (3) The Caduceus, (4) The crescent on a three-arched hill and (5) A human figure as found on the cast coins of Ujjain.

Rev. Caduceus.

These coins are similar to var. 2. III. f (fifth symbol corrected) of *BMC*, p. 29-30, plate XLI, 7-10. The reverse symbol of some of these coins—Caduceus— is formed of a straight line encircled by a wavy line having three curves on both sides and not three circles bisected by a line. This may be a variety of the symbol, but not a new symbol as Trivedi suggests (*JNSI*, XVI, pp. 177-78).

Trivedi's view that the fourth symbol of these coins is 'two inverted semi-circles' also does not seem to be correct. What is visible as the two inverted semi-circles on a number of coins, is the upper half portion of the symbol-crescent on three-arched hill which is partially punched leaving the lower half out of the flan. The form of this symbol is such that all the semi-circles making the crescent and the arches of the hill do not touch each other even when the symbol is visible in full.

5. No. 3055.

Copper, Oblong, 12 mm. X 9 mm., 22 grains.

Obv. Only one symbol—a human figure.

Rev. Blank.

The coin is in the mint condition and there is sufficient space available for more symbols if intended to be punched.

II

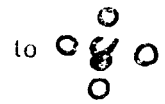
Repoussé Coins

III. REPOUSSÉ : SILVER (TINY).

6. Nos. 3066 to 3068.

Silver, Round, 10.5 mm. in Diam., 3 grains.

Obv. Single symbol  which may be corrected

to 

The coins are thin and light in weight. With such a low weight of 3 grains only, these, in all probability represent the *Māshaka* coins of 2 *rattis* or 3. 7 grains.

These are the earliest known specimens of the repoussé coinage. Later repoussé coins of the fifth century are known from South Kosala and Orissa but none from Mālavā.

III

Uninscribed Cast Coins

IV. CAST : COPPER.

7. Nos. 2800 to 2816.

Copper, Round, 12.5 to 15 mm. in Diam., Weight varying from 16 to 32 grains.

Obv. : Within a circle, elephant facing left with rider.

Rev. : Within the circle, crescent on a three arched hill. The coins are similar to those of *BMC, AI,*

uninscribed cast coins var. p. page 93, plate XI, 23, but the symbols on the present coins are found within a circle which is very clear on some coins. The symbols are drawn crudely on the thinner coins. Remains of the metal left after detachment from the mould are also seen on some coins.

8. Nos. 2817 to 2876.

Copper, Square, from 13 × 13 mm. to 15 × 15 mm., Weight from 31 grains to 65 grains.

Obv. : Elephant fancing left with rider, *swastika*, taurine, the triangle-headed standard and ladder below.

Rev. : Tree-in-railing, hollow cross, taurine and the crescent on a three arched hill.
Cf. Allan's varieties *j* and *k*, pp. 88-89, plate XI, 8 to 14. But the ladder is not found on some of the present coins such as Nos. 2818 and 2820-21. The arrangement of the symbols on the coins without ladder differs from that of coins having ladder symbol. Coin No. 2830 is a flat and broad piece, irregular in shape.

9. 2953

Copper, Round, Diam. 11 mm., 38 grains.

Obv. Hollow cross. 

Rev. A tree-in-railing. 

The reverse symbol of this coin is different from that found on varieties *n* and *o* of Allan's cast uninscribed coins, *BMC*, *AI*, pp. 92-93. The present coin thus, represents a quite new variety. The tree of the coin also differs from the tree found on such coins from Taxila (square coins).

IV

Coins of the City of Vidiśa

The present coins (Museum Register Nos. 2957 to 2977) are very interesting and were not known so far. All of them are of copper, round in shape and measure from 12 to 13 mm. in diameter. They weigh from 13 to 24 grains.

I describe the coins as below :

Obv. : A *chakra* of eight spokes (sometimes within a circle).

Rev. : Signs of three Brāhmī letters read as *Vediśa* or *Veddasa* (Skt. *Vaidiśā*). The characters are similar to those of the inscriptions of Aśoka ; *ve* is very clear on coin No. 2968 and others, while letter ***sa*** is quite distinct on most of them especially on Nos. 2975 and 2958. But the sign of ***di*** has a peculiar form. On some coins such as No. 2974, it is similar to Aśokan ***di*** but on others like 2978 and 2971 looks-like *dda* or the symbol  which is sometimes seen on Mathura coins.[1]

The obverse symbol—*chakra*—is not new to the early Indian coinage ; it is found on the silver punch-marked coins[2] and seen on the *Achyuta* coins.[3] But, the most important is the legend which adds to the list of cities issuing coins, the name of *Vidiśā* or *Vaidiśa*. Other cities having their coins are Erakaṇya, Tripurī, Ujjayinī, Bhāgilā, Kuṛara, Kauśāmbī, Vārāṇasī, Uddehika, Sudavāpa, Pushkalāvatī and Kapiśā.

It is interesting to note that the name of the city issuing the present coins was Vaidiśa as known from the legend, obviously the same as modern Vidiśā, head-quarters of the district of the same name in Madhya Pradesh. The name Vaidiśa (for Vidiśā) is mentioned in the *Mālavikāgnimitram* of Kālidāsa[4] and the copper plate inscription of the Kalachuri

1. Allan *BMC, AI.*, p 169.
2. *BMC, AI*, pp. 58, 43 and 82.
3. Ibid., pp. 117-19.
4. Act V.
   स्वस्ति, यज्ञशरणात्सेनापतिः पुष्यमित्रो वैदिशस्थं पुत्रमायुष्मन्तिमग्निमित्रं स्नेहात्परिष्वज्येदमनुदर्शयति.....

king Budharāja[1] which was issued from *Vaidiśanagara*. The modern village of Besnagar known for a number of early antiquities and the famous inscribed pillar of Heliodorus represents the old city, issuing these coins.

1. Mirashi, *CII*, IV, part I, pp. 47 ff.

AN UNKNOWN PUNJAB SEAL-COLLECTOR

*A. D. H. BIVAR**

[Plates VII-VIII]

The collection of engraved gems which forms the subject of the present note came to light in Southern England during 1956 under rather unusual circumstances. They are reproduced in the plates (VII & VIII) from a set of temporary plasticine impressions. The writer has not seen the original stones, and has no knowledge of their appearance, his study being based solely on the impressions. Recently, however, the collection seems to have become dispersed, and no information is currently available as to their whereabouts and ownership. There is thus a danger that all record of the original association of the gems may be lost. With this knowledge would disappear any clue as to their place of discovery, and the personality of the collector. It is to be observed that he was a person possessing a lively appreciation of antiquities. Such then is the justification of the present publication, which, though admittedly based on incomplete material, may serve some purpose in drawing attention to the collection, and assist in tracing its present owners.

The most recent discoverer of the gems, and the person to whom we are obliged for bringing them to notice was Mr. C. B. Carter, at the time in question a pupil at Charterhouse. He chanced to purchase a piece of furniture in an antique shop at Godalming in Surrey: when he examined his buy, he discovered in one of the drawers the collection of gems, the existence of which had been unknown not only to the vendor, but until the moment of purchase to Mr. Carter himself. It appears that legally the purchaser of second-hand furniture is entitled to the ownership of any goods which may be found in it. The gems, therefore, had become Carter's property. On the advice of Mr. G. W. Mabbott, Senior Science Master at Charterhouse, he reported his find at the Ashmolean Museum. Here the gems were examined by Mr. John Boardman, then Assistant Keeper in the Department

* In the preparation of this article the author has benefitted by profitable discussions of glyptic problems with Mr. Briggs Buchanan and Mr. D. J Wiseman. Help on epigraphic questions was given by Professor J. Brough, Professor W. B. Henning. Professor A. L. Basham, and Dr. Mary Boyce.

of Antiquities, who was thus able to make a preliminary assessment of their significance. At that time the present writer, also a member of the staff of the Ashmolean, was absent on study leave in Persia; but Mr. Boardman, mindful of his interest in such matters, most thoughtfully made the set of plasticine impressions before returning the gems with his comments to Mr. Carter. To this forethought we owe the preservation of a record of the transaction.

Though the impressions were hurriedly made, and one or two are understandably irregular, they provide material entirely adequate for the future identification of the gems. The engravings can indeed be quite well studied from them, and the inscriptions are substantially legible. Subsequently Mr. Carter, who despite his discriminating interest in the discovery was not a collector of antiques, made the decision not to retain the collection, which in due course was purchased by a well-known London art dealer who passed them on to clients. The present writer has been unable to trace the ultimate purchasers, or the final location of the gems.

A cursory inspection of the plates will show that the collection contained a mixture of styles fairly typical of the Indo-Iranian borderlands. **Pl. VII. 1** and **VIII. 1, 3-4** are straightforwardly Iranian, whilst **Pl. VII. 10** and **VIII. 10-11** are as unequivocally Indian. Several also represent Mediterranean or peripherally Mediterranean styles, yet these too would be familiar to any collector handling gems which come on the market in the general area of the Punjab, North-West Frontier, or Baluchistan. Since Gupta examples are present, the implication is that some at least of the gems would have been found not far to the West of Ambala or Lahore.

Curiosity will naturally be felt as to the identity of the person who brought this collection together. To the knowledge of the writer none of these examples has previously been published in the several accounts of the early collectors in the Punjab. It is reasonable to suppose that they once belonged to a military officer, for this would make it easy to understand how they came to be at Godalming. This town is situated close to a number of well known military centres, such as Aldershot, Farnham, Pirbright and Guildford. Many retired military officers reside in these districts, and more than a few must have passed some part of their service in the Indo-Pakistan sub-continent. It is thus a reasonable guess that the collection was brought to this part of England by an officer in retirement. Since the fact that the furniture contained gems was unknown to the antique dealer from whom it was purchased, it is natural to suppose that the owner's death was

indeed the cause of his property being sold. One may thus envisage an elderly collector living alone, with no one at hand who had knowledge of his hobby, or his valuable collection. In spite of such speculations, I have not been able to identify the collector, or to inquire into the question of how he built up his collection. It is to be hoped that one of my readers on examining the plates will recall the gems and be able to identify their former owner. If his career could be traced we might be able to determine the find-spots from which his seal-stones came. None the less, if that proves out of the question, the impressions as they stand are of definite interest and merit. It is to the detailed examination of individual gems that we have now to turn

Achæmenian Period

1. Cylinder-seal. Late fifth century B. C. Width 25 mm. **(Pl. VII. 1)**

Bull-chimaera rearing to the right.[1] The monster's second head, emerging directly from the centre of its back, is that of a griffin. Behind stands a shadowy human figure, with legs set firmly apart, thrusting at the creature's principal head with a spear in his upraised hand. The outlines of the man's body are reduced to a series of squiggles. There is a vague hint that his other arm is extended behind. In front of the Chimaera is the faint suggestion of another human, perhaps no more than the remains of some earlier engraving on a cylinder re-engraved in Achaemenian times.

This legendary monster the Chimaera was a favourite subject in Classical Greek art. The most usual form was represented with a lion's body, from the back of which sprouted the head and shoulders of a goat.[2] The creature's tail commonly terminated in the head of a serpent. Yet though the Chimaera had found its special place in Greek mythology, very similar monsters had long been represented in the art of the Ancient East. With the small variation that the secondary head of the monster appears to grow not from the back, but from the end of a small pair of wings, a decidedly similar monster is found already on the bronzes of Luristan. Though there is controversy as to the exact date of these bronzes, there is little doubt that they predate in the

1. As is customary, I describe the seal designs as they appear on the impressions. On the actual stones right and left would always appear the other way round.

2. Anna Roes 'The representation of the Chimaera', *Journal of Hellenic Studies*, 1934, 21-5; *eadem*, 'The origin of the Chimaera' in *Studies, presented to D. M. Robinson*, St. Louis, 1953, II. 1155.

43. Silver *Nisār*, mint Urdū Ẓafar Qarīn, date 1042-4, wt. 47 grs., size ·5″.

Obv. in a dotted circle غازی شاہ جہان بادشاہ

Rev. ظفر قرین اردوے ضرب ۱۰۴۲

(Pl. XV. 8)

The phrase of *Urdā Ẓafar Qarīn*, 'the Camp associated with Victory' was coined by Akbar and is found on the coins of this Emperor in all the three metals. A *nisār* from this mint is absolutely unique. At p. XXXIX of his catalogue, Whitehead has mentioned a *nisār* of Shāh Jahān of this mint but he has not given its details. Except Shāh Jahān no other ruler is known to have issued coins from this mint.

44. Silver *Nisār*, mint Dārul-khilāfat Akbarābād, date 1043·6, wt. 49 grs., size ·55″.

Obv. بادشاہ غازی شاہ جہان سنہ ۱۰۴۳

Rev. اکبرآباد دارالخلافتہ ضرب سنہ ۶

The *nisār* of this type is not represented in any catalogue but the following *nisārs* of this mint are known :

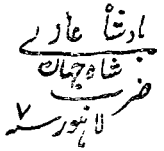
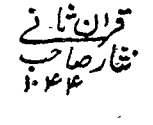
1. Mint Akbarābād. Date 1064. Wt. 17 grs. Ref : *NC*. XVI (3rd series) p. 165.
2. Mint Mustaqirrul-khilāfat Akbarābad. Date 1040. Wt. 15·5 grs. Ref : as above.
3. Mint Dārul-Khilāfat Akbarābād, Date 1046-10. Wt. 43·7 grs. Ref. *NS*. XXXII, p. 473.
4. Mint Akbarābād, Date 1046-9. Wt. Large size. Ref. : *PMC*. p. 431, Pl. XXI.
5. Mint Akbarābād, Date 1047-11. Wt. 85 grs. size of a rupee. Ref. *JNSI*, IV, p. 71.

45. Silver *nisār*, mint Dārul-Khilāfat Shāhjahānābād, date 1066-30. wt. 46 grs., size ·8″

This coin is similar to *LMC*. No. 2426 but the regnal year 30 is in the top line of this coin. About half a dozen

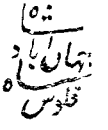
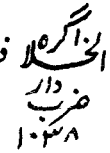
nisārs of this mint are known. They are dated 1060-24, 1061-24, 1063-27, 1066-30, 1067-30, and 1067-31 A. H. In 1048 Shāh Jahān built the New Delhi which he called Shāhjahānābād, and it is by this name with its title of Dārul-khilāfat that the capital is henceforth known on the Mughal coinage.

46. Silver *nisār*, mint Lahor, date 1044-7, wt. 45 grs., size ·6″.

Obv. in a dotted circle  ***Rev.*** 

A *nisār* of this type is not recorded in any catalogue. About half a dozen *nisārs* of Lahore mint are known—three in the Lahor, one in the Lucknow and two in the British museum. One *nisār* is described at P. 473 of *NS.* XXXII but all these *nisārs* are different from our specimen.

47. Copper, mint Dārul-khilāfat Agra, date 1038, wt. 349 grs., size ·75″.

Obv. in a dotted circle  ***Rev.*** 

This is a unique copper coin of Shāh Jahān issued from Āgra mint. Agra is an unpublished mint of this ruler in copper. The date shows that it was issued in the beginning of his reign.

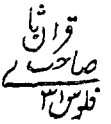
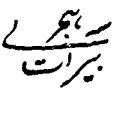
48. Copper, mint Ilahābād, date (10) 41, wt. 344 grs., size ·7″.

Obv.  ***Rev.*** 

This type is not represented in any catalogue. A copper coin of Shāh Jahān of this mint and date 1049 was published at p. 237 of *NS.* XXV by Dr. Panna Lall. Except Akbar no other ruler issued copper coins from this mint. The mint name on them was Ilahābās and not Ilahābād. A large

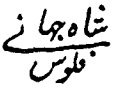
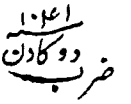
number of silver coins were issued from this mint by many Mughal rulers.

49. Copper, mint Bairāt, date R. Y. 31, wt. 348 grs., size ·8″.

Obv.  *Rev.* 

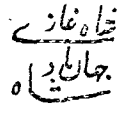
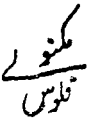
This type is not represented in any catalogue. Regnal year 31 shows that it was struck in the last year of his reign. This mint was mainly used for issuing copper coins by Akbar and his three successors.

50. Copper, mint Dogāon, date 1041, wt. 341 grs., size ·75″.

Obv.  *Rev.*  **(Pl. XV. 9)**

This is a unique copper coin of Shāh Jahān. A few copper coins of only Akbar were issued from this mint. This place is a village near Bahraich in the Province of Oudh. Five copper coins of Shāh Jahān with indistinct dates were published by Vost at p. 76 of *JASB*, LXIV. They all bear the mint name as دوگام and not دوگاون as found on this coin.

51. Copper, mint Lakhnau. wt. 338 grs., size ·8″.

Obv.  *Rev.* 

One undated specimen is recorded at No. 111 of *IMC* and another dated 1041 is described by Tarapore at p. 56 of *NS*. XLIII. But the type of our coin is different from both of them. In our catalogues, copper coins of Akbar and no other rulers are known of this mint but Whitehead says that issues in all three metals have been found of Shāh Jahān and some copper coins of Aurangzeb too (vide p. civ of his catalogue).

Murād Bakhsh (A. D. 1658)

52. Silver. mint Sūrat. date 1068-ahd. wt. 194 grs.

Obv. The Kalima and below

سورت
ضرب ۱۰۶۸

Rev.

مراد شاہ
بن
محمد سکندر ثانی
زصاحبقران جہانپناہ
(یا) فت
ارث احد

BMC. No. 699

مراد شاہ غازی
محمد سکندر ثانی
زصاحبقران جہانی
یافت
ارث احد

Murād Baksh was Governor of Gujarat when he put forward his claim to the succession and struck coins at Surat. The reverse legend on this coin is slightly different from *BMC.* No. 699. The *BMC* specimen does not bear any date also. On the strength of the legend on *BMC* coin, Brown formed couplet No. 57 of *LMC.* The couplet runs as :

گرفت ارث زصاحبقران شاہجہانی
مرادبخش شاہ محمد سکندر ثانی

If we compare this couplet with the actual legend on *BMC* coins, we find that there are no two شاہ and no بخش on the coin. The word گرفت also does not seem to be correct. It should be read as یافت. The *BMC* specimen indicates the same reading. The word جہانپناہ is quite clear on our coin and in place of جہانی it is suggested that we should read it as جہانپناہ. The revised reading of the couplet should therefore be :

یافت ارث زصاحبقران جہانپناہ
سکندر ثانی محمد مُراد شاہ

Mr. Brown's translation of his couplet is this :

Took the heritage of the 'Lord of Conjunctions' Shāh Jahān. Murād Bakshh Muhammad Shāh, the Second Sikander.

The revised couplet is translated by me as under :

Muhammad Murād Shāh, the Second Sikander got the heritage from the 'Lord of Conjunctions' and the refuge of the world (Shāh Jahān).

The latter reading seems to be more plausible to me.

53. Copper, mint Sūrat. date-ahd. wt. 352 grs. size 9″.

Obv. مراسلے فلوس ***Rev.*** سورت احمد ضرب

Copper coins of this ruler are not recorded in our catalogues. Two similar specimens weighing 316 & 333 grs. were published by Wright in *NS*, I, p. 10, but our coin is heavier in weight than both of them.

Aurangzeb (A. D. 1658-1707)

54. Silver. mint Shāhjahānābād. date 1071-4. wt. 194 grs., size ·95″.

Obv. in a dotted circle in square. بادشاہ غازی عالمگیر

Margins. Left ابوالمظفر Top محی‌الدین Right اورنگ‌زیب Bottom بہادر سنہ ۱۰۷۱

Rev. in dotted circle. In square. شاہجہان باد ضرب دار الخلافۃ

Margins. left سنہ ۴ Top جلوس Right میمنت Bottom مانوس

Coins of this mint and in this type are not represented in any catalogue but a rupee of this type bearing date 1070-ahd was published by Brown at p. 423 of *NS*. XIX. Brown's specimen is styled as unique by Whitehead and it is described at p. lxxvii of his catalogue. The only difference in our coin and this coin is that on the reverse legend of this coin, the word ضرب is inscribed at the bottom while on our coin the same word is inserted in the middle of the legend. If we take into consideration this slight difference, then both the specimens are unique by themselves.

55. Silver *nisār*. mint Jahāngīrnagar. date 1088-21. wt. 47 grs., size ·65″.

Obv. عالمگیر شاہ ۱۰۸۸ نثار باد ***Rev.*** جہانگیر نگر ضرب ۲۱ سنہ

(Pl. XV. 10)

Dacca was renamed Jahāngīrnagar after the emperor Jahāngīr. This *nisār* is not represented in any catalogue but a *nisār* of regnal year 19 and weighing 11 grs. is described by Nevill at p. 473 of *NS*. XXXII.

56. Silver *nisār*. mint Shāhjahānābād. date 1072-4.

57. „ „ „ „ „ 1076-8.

These *nisārs* are similar to *PMC*. No. 1947 except the date.

58. Copper, mint Aurangābād. date (10)70-ahd. wt. 346 grs., size ·8″.

Obv. عالمگیر / جلوس ماں (۱۰) / سنہ **Rev.** ضرب اورنگ آباد / سنہ احد

(Pl. XV. 11)

This is a new mint of Aurangazeb in copper and hence it is a unique piece. Aurangzeb, when Governor of the Dakhan, founded the city of Aurangābād and named after himself.

Jahāndār Shāh (A. D. 1712-13)

59. Silver. mint Ahmadnagar. date-ahd. wt. 195 grs., size ·95″

Obv. same as *LMC*. No. 3542 **Rev.** ضرب احمدنگر / احد مانوس / میمنت / جلوس

This coin is not recorded in any catalogue. A few rupees of this mint are known and one is recorded at p. 232 of *NS*. XIII, by Wright.

60. Silver. mint Ālamgīrpur. date-ahd. wt. 198 grs. size ·85″.

Obv. جہاں شاہ / جہاندار باد / صاحب قران **Rev.** مانوس / میمنت / جلوس سنہ احد / ضرب عالم گیرپور

(Pl. XV. 12)

No coins in any metal are known to have been issued from this mint by Jahāndār Shāh and hence it is a unique rupee of this ruler. Ālamgīrpūr was probably the town of that name near Karnūl (Qamarnagar) in Dakhan. It first occurs as a mint town in the reign of Aurangāzeb.

61. Half rupee. No mint. date 1124-ahd. wt. 96 grs. size ·7″.

Obv. جهندار شاه ۱۱۲۴ صاحب قران ***Rev.*** Usual legend.

Half rupees of Jahāndār Shāh are not known and hence this is a unique specimen. The legend on the obverse is arranged in a new style.

Farrukhsiyar (A.D. 1713-19)

62. 1/8th rupee. mint Mustaqirrul-Khilāfat (Akbarābād). date R. Y. 6, weight 24 grs., size ·5″.

This coin is similar in type to full rupee No. 3611 of *LMC*, but this denomination is not represented anywhere and hence it is unique. Tiny gold coins of this ruler weighing 22, 44, and 53 grs. are described at No. 900–902 of *BMC*.

63. Copper. mint Ahmadnagar. wt. 206 grs., size ·9″.

Obv. فرخ سیر شاه ***Rev.*** ضرب احمد نگر

Coin of this type is not recorded in any catalogue. Copper coins of Farrukhsiyar of this mint are exremely rare. A specimen is said to be in the White King cabinet.

Ahmad Shāh (A. D. 1748-54)

64. Copper. mint Elichpūr. wt. 308 grs. size ·75″.

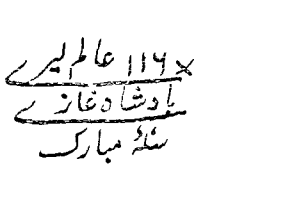
Obv. احمد شاه بادشاه ***Rev.*** ضرب الچپور سن

This type is not figured in any catalogue. Coins of this mint are very rare. Some copper coins of the later Mughals and issued from this mint are described by Haig at p. 63 of *JASB*, LXXI. These coins were found in Barār. Under the

Mughals, Elichpūr was the provincial capital of Barār. This province was conquered by Akbar in his 31st year. Rupees of the Ilahi type were struck at this mint.

'Ālamgīr II (A. D. 1754-59).

65. Silver. mint Kālpī. date 116 × —ahd. wt. 192 grs., size ·9".



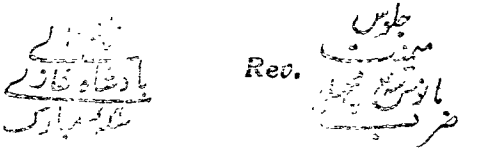
Obv. بادشاہ غازی عالمگیر ۱۱۶ × سکۂ مبارک

Rev. مانوس میمنت سواحد جلوس ضرب کالپی

M.M. 222 over ضر

Coins of this type are not recorded in any catalogue. Kālpī was a mint of the Sūrīs and some silver and copper coins were issued in the name of Akbar from this mint. After Akbar, this mint was reopened in the reign of Ahmed Shāh and rupees of his successors 'Ālamgir II and Shāhālam II are known in private collections.

66. Silver. mint Machhlipatan. date 1172-4. wt. 191 grs., size ·9".



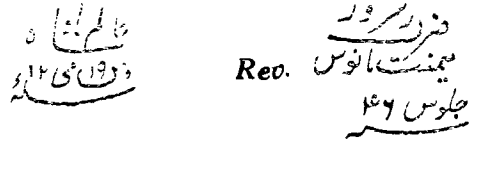
Obv. بادشاہ غازی سکۂ مبارک

Rev. جلوس میمنت مانوس ضرب

Coins of this type are not described in any catalogue. Machhlipatan, better known as Masaulipatam is a port on the Coromandal Coast. The earliest issues are those of Aurangazeb. Rupees of this ruler are known and one specimen is published at p. 125 of *NS*. V by Thānāwāla. Whitehead says that coins of 'Ālamgīr II and Shāhālam II of this mint are the issues of the East India Company.

Shāh 'Ālam II (A. D. 1759-1806)

67. Gold. mint (Dā)r (ul) Saiūr (Sahāranpūr). date 1219-46.



Obv. in a dotted circle عالم شاہ

Rev. ضرب سرور میمنت مانوس جلوس ۴۶

The epithet of Dārul-surūr was used both for Burhānpūr and Sahāranpūr by Shāh 'Ālam II (vide gold coin No. 4489 dated 1195-22, silver coins No. 4900 to 4906 dated 31, 33, 34, 37, 40, 45, and 46 regnal years and copper coin No. 5214 dated 31 regnal year of *LMC*.) Our coin bears the same date as coin No. 4905 of *LMC* and in the absence of the mint name, this coin is assigned to Sahāranpūr mint, due to its close similarity with the coins of the Lucknow museum. Even then, this is a unique coin because no gold coins of Sahāranpūr mint are known so far. This coin was also noticed by Shri. P. L. Gupta at p. 54 of *JNSI*, Vol. X but it was not described in details. Whitehead says that in Akbar's time, it was a mint for copper coins. Except for a few rupees of Aurangazeb no other Mughal coins are known from this mint till the reign of Shāhālam II when coins both in silver and copper were struck. But ours is a gold coin. A rupee of Akbar II as Claimant to the throne, dated 1203-1, and bearing the same mint and epithet is published at p. 3 of *NS*. XXXVI.

63. Silver. mint Sironj. date R. Y. 6. wt. 193 grs., size ·85″.

Obv. شاه عالم بادشاه (ح)امی دین پناه هفت کشور

Rev. مانوس میمنت جلوس ضرب سرو پنجسه ۶

M. M. 222 in and out of جلوس س

No coins of this type are recorded in any catalogue. Whitehead says that a copper coin of Akbar of this mint is published and illustrated in *NS*. V. Rupees of Farrukhsiyar and Muhammad Shāh are also published. One or two rupees of 'Ālamgīr II and Shāhālam II are also known but no reference to these coins is given by him. Sironj is a town in Rājputāna, situated on the direct route between Dakhan and Agra.

69. Silver. mint (Go)bindnagar. date 1198-10 ?. wt. 192 grs. size ·9″.

Obv. in a dotted circle شاه عالم بادشاه ۱۱۹۸

Rev. مانوس میمنت سنه جلوس ضرب (گو) بندنگر

M.M. 228*a*
M.M. 331

(Pl. XV. 13)

M. M. 228a is a flower and M. M. 331 is a dagger.

This is a unique coin. The coins of this mint are not known to have been issued either by the Mughals or the Native Chiefs of India. But the fabric of this coin shows that it was issued by some native ruler of India in the name of Shāhālam II.

70. Silver. mint Khambāyat. date R. Y. 3. wt. 197 grs., size ·75″

Obv. شاہ عالم بادشاہ ***Rev.*** ضرب سنہ ۳ جلوس کمبایت

This coin does not belong to the Nawābs of Cambay whose coins are few and of a different pattern. This type is not represented in any catalogue but a rupee bearing the same mint and date is described as p. 31 of *NS.* XLIII by Vicāji Tārāporevāla. An article "The Mughal coins of Cambay" by Dr. Taylor is published at p. 542 of *NS.* XX.

CLAY SEALINGS FROM RAJGHAT

V. S. AGRAWALA

A large number of clay sealings were exposed in 1940 during the dig conducted by the railway authorities and later by the Dept. of Archaeology at the old site of Vārāṇasī represented by the Rajghat of today being a series of raised mounds along the Ganges near the Malaviya Bridge. This material is now deposited in several museums, viz. (1) Bharat Kala Bhavan, Banaras Hindu University, (2) Municipal Museum, Allahabad, (3) State Museum, Lucknow, and (4) National Museum, New Delhi. A detailed illustrated study may be attempted later, but it is proposed to record here in summary form the names of the religious establishments, educational institutions, and rulers whose sealings were found. There was also a fourth class of documents of private individuals and traders, which are very numerous. A small number of Śreṇi and Nigama sealings were also found.

I. Religious Establishments

Amongst sealings of religious temples are the following :

(1) Avimukteśvara—also written as Śrī-Avimukteśa, Avimukta, and Avimukteśvara-Bhaṭṭāraka. In the Mahābhārata Avimukta is mentioned as the chief deity at Vārāṇasī :

अविमुक्तं समासाद्य तीर्थसेवी कुरूद्वह ।
दर्शनाद् देवदेवस्य मुच्यते ब्रह्महत्यया ॥

(वनपर्व 84, 78)

In the Poona critical edition the verse is treated as an interpolation (Āraṇyaka-parvan, vol. 1, p. 292). Avimukta is mentioned in the Daśakumāracharita of Daṇḍin, the Matsya Purāṇa and the Kāśī-khaṇḍa.

(2) Devadeva-svāmī—This was but another name of Avimukta, as shown by the above epic passage.

(3) Gabhastīsvara—The name occurs in Kāśī-khaṇḍa.

(4) Śrī-Sārasvata—A Śiva-liṅga sacred to Sarasvatī, occuring in the Kāśī-khaṇḍa list.

(5) Yogeśvara—also called Yogeśvara-svāmī on another seal ; a name found in the Kāśī-khaṇḍa. It seems to have been a centre of Yoga discipline.

(6) Pītakeśvara-svāmī—There is also a combined sealing of Avimukta and Pītakeśvara-svāmī, showing a joint administrative arrangement between these two temples. The Pītakeśvara-liṅga occurs in the Kāśī-khaṇḍa and is still worshipped under its old name in the vicinity of Viśvanātha, near Sākshī-Vināyaka.

(7) Bhriṅgeśvara—A Śiva-liṅga also found in the Kāśī-khaṇḍa.

(8) Vaṭukeśvara-svāmī—A Śiva-liṅga representing the Vaṭuka form the Deity of Kāśī.

(9) Kalaseśvra—The name is in the Kāśī-khaṇḍa.

(10) Skanda-Rudra—The full legend is *Namo svāmino Śrī-Skanda-Ru(drasya)*.

(11) Kardamaka-Rudra—There is a temple of Kardameśvara Śiva on the Pañchakrośī Parikramā path, marking the boundary of the holy city.

(12) Lolakāditya—Inscribed *Śrī-Lolakāditye*, showing the Sun-god between two conches ; now represented by the deity of the Lolārka-kuṇḍa near Bhadainī in Vārāṇasī.

(13) Saddharma-chakra—Inscribed *Śrī-Dharmachakre*, and showing a *dharma-chakra* between two antelopes. It seems to have been a sealing of the Buddhist establishment at Sarnath.

(14) Bhishaka-Vihāra—Legend *Bhishaka-vihāre tharasa bhikhusaghasa*. This was the name of a monastery of the Sthaviravādī Bhikshus. The name reminds of the Ārogya-vihāra, of which a sealing was found at Kumrahar near Patna.

II. Educational Institutions

(1) Bahvṛicha-charaṇa—This was a Charaṇa or College of Ṛigveda of which 5 sealings with a beautiful motif were found, showing an *āchārya* with matted locks standing with a spouted jar and flanked by trees of his hermitage.

(2) Charaka-charaṇa—It belonged to a College of Kṛishṇa-Yajurveda, imparting teaching of the Charaka-recension. Charaka was the name of Vaiśampāyana, whose great pupils included Kaṭha and Kalāpin. This institution at ancient Vārāṇasī concentrated on the promotion of the Śākhās and Brāhmaṇas of the Black Yajurveda and points to the group of Vedic scholars from the south residing at Banaras.

(3) Chhandoga-charaṇa—This was a School devoted to the study of Sāmaveda. On one sealing the name Sāmaveda also occurs.

(4) Trividya—a centre devoted to the study of the three Vedas at one place. The previous three sealings point to Vedic studies being organised under separate Charaṇas, viz. Bahvṛicha for Ṛigveda, Charaka for Yajurveda and Chhandoga for Sāmaveda.

(5) Chaturvidya—Inscribed *Śrī Chaturvidyasya.* This College for the study of the Four Vedas at one place seems to have been attached to the religious establishment called Chaturvedeśvara in the Kāśī-khaṇḍa of the Skanda Purāṇa. It appears that the religious shrines were fostering educational institutions for the systematic promotion of traditional learning, as in the above College of the Four Vedas.

(6) Śrī-Sarvvatra-vidya—a sealing with a prominent Nandi seated on pedestal. It seems to have been a religious-cum-educational foundation for the study of classical Sanskrit Śāstras, a College of All Sciences. In ancient times a scholar of one branch of learning was called *Veditā* (Pāṇini) or *Ekavidya*, of several branches *Bhāyovidya* (Yāska) and of all branches *Sarvavidya* (Yāska).

It appears that there was a complete reorganisation of the educational and academic life of Vārāṇasī during the Gupta period which made it a world-famous centre of learning and literature. The sealings provide archæological evidence of that Vārāṇasī of blazing glory pictured in the Kāśī-khaṇḍa of the Skanda Purāṇa.

III. Śreṇi and Nigama

A few sealings belong to the economic guilds and the corporation of traders.

(1) Gavayāka Sreṇi—Inscribed *Gavayāka seniye*, 'in the Guild of the Milkmen'.

(2) Āraṇyaka Sreṇi—Inscribed *Vārāṇasy-Āraṇyaka-Sreṇi*, 'the Guild of the Foresters of Vārāṇasī'. It appears that the forest-tribes settled round Banaras towards Mirzapur and Vindhyāchala were supplying the city with coal, fuel and other forest-produce, as they are doing to this day, had made for themselves a habitation on the outskirts of the city and given themselves a corporate organisation on the lines of the usual guilds.

(3) Nigama—A square sealing in early Kushāṇa script shows four letters *NE GA MA SA* written in the four corners of a square enclosure with an entrance. Another Kushāṇa sealing reads *Nigamisa*. But about half a dozen sealings with the motif of a domed granary read *Nigama* in Gupta script, and record the names of Bharata, Śrīdatta and Śauryāḍhya (शौर्याढ्य) who certainly must have been members of the economic corporation called Nigama. The Nigama was a body of wealthy traders, mostly bankers and jewellers called Śreshṭhin, whose number was fixed by convention and who were admitted to the corporation by unanimous election and who were conferred wide powers by the State.

IV. Kings and Rulers

A good number of sealings are inscribed with the names of kings and rulers, which adds to our information about the political history of old Vārāṇasī. We record the names below without entering into a detailed disquisition here.

(1) Yuvarāja Magu—Inscribed *yuvarajā magu*. Magu was an Avestan name, from which we have *Magu-paiti*, a a wiseman, and Pahlavi *Mayopat*, Persian *Mobed*. In the Kaśyapa Buddha Image Inscription from Mathurā we find the name Devaputra Māghu.

(2) Jeṭhadata—Inscribed *Jeṭhadatasa* in the script of about first century B. C. Inverted triangle-headed standard (*Vaijayantī*) symbol below, and *Nandipada* and *Svastika* above.

(3) Jeshṭhamitra—Inscribed *Jeshṭhamitrasya* in late Kushāṇa script.

(4) Kṛishṇasena—Bow and arrow above; in the centre *Kṛishṇasenasya* flanked by *yūpa* on l. and *śakti* on r.; below *svastika, nandipada, śrīvatsa* and *śaṅkha*.

(5) Harisheṇa—About a hundred sealings of this king were found, with symbols as above.

(6) Bhīmasena—Inscribed *Rajño Bhīmasenasya*. Symbols, bow and arrow above; standard in railing on l. and *yūpa* in railing on r. Owing to similarity of symbols Kṛishṇasena, Harisheṇa and Bhīmasena seem to belong to one family, and the last appears to be identical with Rājā Vaśishṭhīputra Śrī Bhīmasena of the Bhīṭā seal marked with the bow and arrow symbol (*ASR*, 1911-12, p. 51, pl. XVIII, fig. 27).

(7) Navva—Reading *Navvasya*; bow and arrow above; in the centre a spear on l. and a *yūpa* on r.; below, a pile of three balls. He seems to be different from Neva, whose coins have been known for a considerable time, for the symbols on coins and sealings are different. Sanskrit *Navya* means 'praiseworthy', from the root *nu*, to praise.

(8) Abhaya—Reading *Rājño Abhayasya*. Symbols, Nandī with three-arched hill in front; below him *chakra*, *śaṅkha* and *śakti*.

(9) Dhandeva—Reading *Rajño Dhandevasya*. Symbols, Nandī standing before *chaitya* flanked by a *yūpa* on l. and *śakti* on r. A very large number of sealings of this ruler were found.

(10) Aśvagosha—Legend *Aśhvaghoshasya* in the script of the Kushāṇa period. Above lion couching to l.

(11) Rudramagh—Legend *Mahāsenāpatisya Rudramaghasya* in centre. Symbols, *Nandipada* and bow and arrow above; three-arched hill in the lower field. He seems to be a member the Magha family of Kosam.

(12) Śivamagha—Legend *Rājñā (ḥ) Kautsīputrasya Śrī-Śivamaghasya*. Symbols, above *Nandipada* and two other symbols now defaced; below, bow and arrow, three-arched hill and *ḍamaru*. On a Bhīṭā sealing occurs the name of Gautamīputra Śivamagha who must have been a different ruler. Kautsīputra Śivamagha seems to have been a brother of Kautsīputra Poṭhasirī, both being sons of Vasishṭhīputra Bhīmasena of the Ginja Inscription.

(13) Achyutavarmman—Legend *Mahārāja Śry-Achyutavarmman* in early Gupta script of South Indian variety.

(14) Mānyaditya—Reads *Mu(ā)nyāditya rajana* in late Kushāṇa script.

V. Ministers, Officials and Offices

(a) The following sealings are those of Ministers:

(1) Amātya Janardana.

(2) Amātya Kapilaka.

(3) Amātya Hastika.

(4) Amātya Aryaśarmā.

(5) Amātya Śoṇa.

(6) Amātya Śrī-Dvārika.

(7) Amātya Boṭa

(8) Amātyaputra Kalabhaka.

(b) There are three sealings of Daṇḍanāyaka Anuttara, Daṇḍanāyaka Sarva, and Daṇḍanāyaka Satyavrata.

(c) There are three sealings of government offices of Vārāṇasī reading :

(1) *Bārāṇasyādhikaraṇasya* (Gupta script),

(2) *Kumārāmātyadhikaraṇasya* (Gupta script),

(3) *Koshṭhagarikana* in Kushāṇa script, of the officers in charge of the Royal Store-houses.

Several hundred sealings of private individuals and traders, to be dealt with later, also throw welcome light on the history of ancient Vārāṇasī.

THE COIN-COLLECTION IN THE ALLAHABAD MUSEUM

R. R. TRIPATHI

Though the museum came into being in 1931, yet the work of collecting coins was begun in the year 1934. In the initial stage, uncleaned coins were simply collected from different ancient sites of the State and dumped in the store. No effort was made to clean, identify and catalogue them in a scientific way due to lack of appropriate technical hand. The status quo was maintained upto 1943 when a whole time curator was appointed for the proper upkeep of the museum antiquities. Since then, considerable progress in proper cataloguing and identification of coins has been made, and an appropriate report about them is possible. Categories of gold, silver and copper coins in this museum are enumerated as follows.

Gold Coins

Museum coin cabinet possesses only 34 gold coins. These coins represent the kings of Kushāṇa, Gupta, medieval and Mughal dynasties. In this category, there are 5 Kushāṇa coins, 17 Gupta coins, 4 medieval coins, one small south Indian coin and 7 Mughal medals and coins in all. The details and types of above-mentioned coins are as below :

Coins of Gupta Dynasty

1. One coin of Chandragupta I (King-and-Queen standing).
2. Four coins of Samudragupta.
   (a) Aśvamedha type (b) Standard type (c) Archer type (d) Battle-axe type
3. One coin of Kācha
4. Six coins of Chandragupta II
   (a) Lion-slayer type—one (b) Archer type—three (c) Chhatra type—two.
5. One coin of Kumāragupta I. Horseman type.
6. One coin of Skandagupta. Archer type.
7. One coin of Prakāśāditya. Horseman type.
8. One coin of Puragupta.

Medieval Coins

1. Two debased gold coins of Śrī Govindachandra Deva
2. „ „ „ „ Śrī Gangeya Deva

Mughal coins include the coins of Shahjehan, Shah Alam, Mubarak Shah, along with some medals of various types.

There is one south Indian gold coin having the god Venkateśvara and his two wives standing on the obverse. Reverse side is granulated.

Silver Coins

There are 375 silver punch-marked coins of different varieties and sizes. Out of them, three coins are of long and thick variety generally called bar type, while there is one cup-shaped punch-marked coin in this collection. A few Kshatrapa coins are also represented here but they are not worth mention.

Three silver coins of Skandagupta have recently been added to the coin cabinet of the museum from Jhusi, an ancient site across the river Ganga near Allahabad. These coins bear the head of the king on the obverse, and a circular legend with a peacock in the centre, on the reverse.

Besides above, about 400 silver coins of Mughal kings and other rulers representing chiefly Humayun, Akbar, Jahangir, Shahjehan, Aurangzeb, Shah Alam, Ahmad Shah, and others have been acquired by the museum.

Copper Coins

The museum coin cabinet preserves 26 punch-marked copper coins, including five bar type coins which are said to be of rare variety. In addition, there are about 350 uninscribed and inscribed coins of different dynasties and rulers beginning from 3rd cent. B.C. to 6th cent. A.D. Among these there are some very rare and unpublished varieties which may reveal names of entirely new rulers in the region of their provenance. These above-mentioned coins represent the following varieties, dynasties and rulers.

1. Uninscribed and inscribed cast copper coins of Kauśāmbī and Ahichchhatra of Mitra dynasty and other rulers.
2. Coins of tribal rulers from Ahichchhatra.
3. Kushāṇa copper coins from Kauśāmbī and Mathura.
4. Copper coins of Gupta dynasty from Kauśāmbī and Ahichchhatra.
5. Muhammadan coins from Kauśāmbī and Jhusi.

It would not be out of place to describe some important specimens of the collection so as to give ready reference to the scholars. The museum preserves several varieties of Kauśāmbī coins of Lanky bull type of small as well as large size.

There are still more varieties of uninscribed cast coins but they cannot be described here in detail. To come to inscribed cast coins: only four specimens of Kauśāmbī coins having the legend *kasavī* were known so far; one in the British Museum, London published by Allan[1], second in Indian Museum, Calcutta, third in the possession of Shrinath Shah of Varanasi and fourth in the State Museum, Lucknow.[2] The fifth specimen is preserved in this museum, but it does not show all the symbols found on the above-mentioned 4 coins. It has only the Ujjaini symbol above the legend *kasavī*. Elephants, *Jayadhwaja* and other symbols are missing. Its reverse side is completely obliterated. Another peculiarity lies in its legend. Former four coins have *bī* while the present one has *vī*. In this respect the coin proves to be unique. It can be presumed that the present specimen is cast from a different mould. Other inscribed coins of Kauśāmbī, Pāñchāl, Mathura, and Ayodhya rulers are as below: Agnimitra, Bṛihaspatimitra, Varuṇamitra, Bhānumitra, Suryamitra, Indramitra, Āryamitra, Viśākhadeva, Satyamitra, Purushadatta, Rāmadutta etc. and many others. Besides, some coins having peculiar legends as *madavika, vavava, kota,* and *kaṇva* are also preserved here. Coins of Rajño Ravana, Harigupta, Malva coins of Sātkarṇi, coins of Achyuta with portrait on one side, and one coin of Rāmagupta also form part of this collection. One coin of Chandragupta II resembling the Archer type of his gold issues is recently acquired from Kauśāmbī. Only one specimen of this type was known to A. S. Altekar from *JASB*, 1933, No. 12, which he has described in his *Coinage of the Gupta Empire*.[3] Along with above, some Ujjaini coins from Eraṇ too have been acquired.

We have also acquired a clay mould of punch-marked coin from Jhusi and another from Kauśāmbī. One terracotta mould of the silver coin of Chandragupta II also has recently been acquired from Jhusi. It contains the head of the king on the obverse and a circular legend with *garuḍa* in the centre on the reverse side.

1. *BMC*, *Ancient India*, Introduction, pp. xcviii & xcix.
2. *JNSI*, XI, pt. I, pp. 10-11.
3. pp. 157-58 (Pl. XVI, no. 12).

HISTORY OF THE COIN-COLLECTION IN THE ANDHRA PRADESH GOVERNMENT MUSEUM

N. RAMESAN

The Government of Hyderabad created an Archaeological Department for the State in the year 1914 A. D., and Dr. Yazdani was appointed as its first Superintendent. Within a few years of taking charge, he felt the need for a good museum for Hyderabad which was one of the premier States of the country. Originally the chief feature of the museum was designed to be its economic side and it was conceived that in addition to the artistic pieces, the crafts and industry of the State must also be exhibited. A scheme on these lines was prepared in the year 1916-17 and Shri T. Srinivas was appointed as the first Curator of the Hyderabad Museum. He was deputed for a period of six months to visit and study the work of museums in the other parts of the country. A proper building for the Museum was found to be a sine-qua-non and gradually the Museum with the Ajantha pavilion on the public gardens of Hyderabad, came to be established in the Department of Archaeology. In recent years, a building called the Khajana building which was part of the Sarf-e-Khas of H E. H. the Nizam was also released and this also houses some sculptures. A new pavilion called the Yeleswaram pavilion has been built within the compound of the office of the Director of Archaeology, Hyderabad and this houses some very important antiquities and coins.

The coin collection in the Hyderabad Museum is one of the best in the country. The total number of coins exceeds 3,50,000, and almost all the periods of Indian history are represented here. Particular mention may be made of the fact that large hoards of coins of the Andhra kings of practically every dynasty are available.

In the year 1960-61, three catalogues of the coins in the Hyderabad Museum were published, with the generous financial assistance by the Government of India. These catalogues are: (1) *Punch-marked Coins in the Government Museum, Hyderabad* by P. L. Gupta, (2) *Catalogue of the Sātavāhana Coins* by M. Rama Rao, and (3) *Catalogue of the Qutub Shahi Coins* by Abdul Wali Khan. The catalogue on the Qutub Shahi coins is a very important addition to the science of numismatics as almost all the Qutub Shahi coins are

represented in this catalogue. In the year 1961-62, it is proposed to bring out catalogues of Ikshvāku, Western Kshatrapa, Vishṇukuṇḍin, Eastern Chalukya and Vijayanagar coins and also a catalogue of the Bahamani and Mughal coins in the cabinet of the Hyderabad Museum. This will complete the entire corpus of coins in Andhra Pradesh, from the earliest days to the modern times.

The coins were acquired in the Hyderabad Museum mainly from the treasure troves, though some rare specimens were also purchased from private collectors. There were also some transfers from other museums. In the year 1918-19 A.D., 605 silver coins and 1141 copper coins of Bactrian and Indo-Greek kings, Indo-Parthian dynasties, Kushāṇa kings, Western Satraps, Sassanian dynasty, early kings of Delhi and their contemporaries, Mughal kings and Asafjahi dynasty were acquired.

Many coins were presented by the Durbars and museums of the other parts of the country, for example, in the year 1922, 6 coins were presented by the Jodhpur Durbar, 16 by Bikaner Durbar, 19 by Madras Government, 4 by Madras Museum, 57 by Lucknow Museum, 63 by U. P. Government, 393 by H.E.H. the Nizam and 46 by the Central Treasury of H.E.H. the Nizam. In the same year, nearly 2730 coins were acquired as treasure troves and 1925 were purchased. This was one of the largest purchases made by the Hyderabad Museum.

There are some coins of rare Mughal mints, which can be gleaned from the collection in the Hyderabad Museum, as for example, a rupee of Aurangzeb in which the Hizri year is clearly mentioned as 1100. The regnal year is 32 and the mint name Sikakul which has been identified as Srikakulam of the present Andhra Pradesh. Similarly, there is a coin of Mohd. Shah from the Bankapur mint. Coins of this mint are quite rare and the coin of Mohd. Shah is absolutely new. Similarly Mohd. Shah of Nusratabad coins were unknown till they were acquired by the Hyderabad Museum.

Many *Padmataṅkas* of the Yadava kings of Devagiri viz. Singhana II and his two grandsons Krishna-Kanhara and Mahadeva have all been brought to the Hyderabad Museum as treasure troves. A gold coin of Mohd. Adil Shah is a rare and unique one. This was acquired in 1923 from the Central Treasury of Hyderabad.

During the year 1926, about 40 silver coins of the Western Chalukyas were acquired as treasure trove.

These have *varāha* (boar) symbol in the middle, the other symbol being the lotus syllable (*Śrī*) in the old Telugu-Kannada script. The names of the kings who issued them are also found, as for example, Rayagajakesari, Dayagajakesari, etc.

During the same year, a very significant hoard of inscribed Eastern Chalukyan coins was discovered. The coins have an inscription of *Vishama Siddhi*, the brother of Pulakesin II. In some coins, the word *satya*, obviously referring to the word *satyāśraya*, is also found.

The most significant addition to the coin cabinet of the Museum was in 1929, when a large hoard of punch-marked coins was found at Karimnagar. In addition, several other hoards of the punch-marked coins have been acquired and all these have been scientifically catalogued.

The excavations conducted by the Department of Archæology at Kondapur, an ancient Sātavāhana site, have brought to light several interesting coin hoards. At Pedabankur which is also a Sātavāhana site, a large hoard of coins has been unearthed. The Sātavāhana coin hoard will run to the order of nearly 40,000. There is one very important coin of this dynasty which is published as No. 1 in the *Catalogue of the Sātavāhana Coins in the Andhra Pradesh Government Museum*, which establishes that the Sātavāhana rule started from Telengana area of Andhra Pradesh.

Of the recent additions to the Museum, three important hoards deserve mention. In 1953, a treasure trove of nearly 8,000 silver punch-marked coins was unearthed near Amaravati, Guntur District, which after the creation of Andhra Pradesh found its way to the cabinet of the Hyderabad Museum. It is now under study by Dr. P. L. Gupta and a special catalogue of this hoard is expected to be published during the course of this year. A cursory examination has revealed that there are nearly 50 very important coins in this hoard.

The next important hoard is the Nalgonda hoard of nearly 4,500 copper coins which seem to belong to the Eastern Chalukyan dynasty. Many of these are inscribed with several names and in several scripts. These coins are also under study by Dr. M. Rama Rao, and a special catalogue of these also is likely to be published this year.

There is another hoard of nearly 600 excellently preserved coins belonging to the Vishṇukuṇḍin dynasty, who are one of the very early Andhra line of kings, and the provenance of

the coins, and the recurrence of the lion symbol on this hoard as well as on the Eastern Chalukyan hoard are very significant. A catalogue on this by Dr. M. Rama Rao will also be published this year.

In addition to the above hoards, a hoard of nearly 1,000 silver Roman coins was discovered in Nalgonda in 1959 and these are very important since Roman coins in such large numbers are rare and unique.

Also, a hoard of nearly 300 coins of the Western Kshatrapas was unearthed at Petlurivaripalem in Guntur District of Andhra Pradesh. In addition, about 250 Ikshvaku coins were also unearthed near Ongole in Guntur District.

The excavations at Yeleswaram have thrown out important coins, though not in large numbers, including a well preserved Roman gold coin.

THE COLLECTION OF INDIAN COINS IN ASHMOLEAN MUSEUM, OXFORD

HELEN MITCHELL

The Heberden Coin Room of the Ashmolean Museum, Oxford has since 1921 housed the combined collections of the University, to which have been added the collections formed by various colleges and now deposited on permanent loan. Before 1921, the main University collection was kept in the Bodleian Library, being referred to in publications as the Bodleian Collection. Coins acquired by the Ashmolean Museum itself from its foundation in 1683 do not, in the case of Indian coins, constitute a great number : they were deposited in the Bodleian from 1860 until they returned to the Ashmolean in 1921.

The nucleus of the Bodleian cabinet was the choice collection made in India during the early nineteenth century by J. B. Elliott, and presented to the Bodleian in 1859 : a collection notable for its wide range (1500 coins representative of almost all the Indian series) and high quality. To this were added other donations and a few purchases. In 1888 Stanley Lane-Poole published his *Catalogue of the Muhammadan Coins preserved in the Bodleian Library*, and in the *Numismatic Chronicle* (1891) E. J. Rapson listed all the Gupta coins in the Bodley cabinet at that time in his "Notes on Gupta Coins."

Of the college collections the most notable, so far as Indian coins are concerned, are the Christ Church, St. John's College and, to a lesser degree, Corpus Christi College cabinets. The Oriental collection in the Christ Church cabinet appears to have owed its formation to Dr. Richard Browne, who died in 1780 : certainly the greater part of the collection was assembled in the eighteenth century.

After the foundation of the Heberden Coin Room and the amalgamation of the various collections, the coins, together with manuscript records and a numismatic library, have been readily accessible to students. Recent years have seen a remarkable growth in the Indian series. Of especial note was the munificent gift (1956 -8) by Dr. H. E. Stapleton of his fine collection : his coins of the Sultans of Bengal and the kings of Assam are particularly deserving of mention. In 1934, a most useful gift of over 1650 coins, mostly copper, was made by T. B. Horwood. An annual grant from the University now allows a programme of consolidation and

expansion to be carried out. Among recent notable purchases was the major part of Mr. A. Master's collection, which has markedly strengthened the Museum's representation of the Sultans of Gujarat and the Mughal Emperors.

Ancient India:	punch-marked	157
	uninscribed cast	65
	Tribal (Ayodhya 18, Kauśāmbī 13, Kuṇinda 8, Malava 214, Mathura 21, Pañcāla 38, Taxila 36, Ujjain 38, Vatasvaka 1, Yaudheya 7)	394
Bactria & Indo-Greek		531
Indo-Scythian		328
Indo-Parthian		68
Kushāṇa		399
Kushāṇo-Sassanian		34
Gupta		115
Western Satraps		130
Hūṇas		66
Kashmir		209
Gadhiya		40
Hindu Kings of Ohind		89
W. Chedi 5, Jejakabukhti 1, Tomars 1, Narwar 15, Kanauj 13, Ajmer & Delhi 4, Orissa 2, Vijayanagar		748
Sultans of Delhi		606
Governors & Kings of Bengal		372
Nizam Shahs of Ahmadnagar		4
Adil Shahs of Bijapur (larins)		5
Qutb Shahs of Golconda		3
Sultans of Kashmir		29
„ „ Jaunpur		102
„ „ Gujarat		401
„ „ Malava		69
Bahmanis of Gulbarga		73
Mughal Emperors		836
Ahmadabad: post-Mughal		89
Native States: (Awadh 63, Mysore 103, Baroda 154, Bhaunagar 5, Cambay 10, Chhota Udaipur 2, Junagarh 8, Kolhapur 1, Kutch 46, Lunavada 5, Nawarnagar 48, Radhanpur 16, Porbandar 2,		

Satara 5, Bharatpur 1, Bikaner 11, Bundi 17, Dungarpur 4, Jaipur 36, Jaisalmer 3, Jodhpur 21, Kishangarh 1, Kuchawan 1, Mewar 26, Partabgarh 10, Tonk 1, Bhopal 27, Srinagar in Bundelkhand 4, Dewas 9, Gwalior 33, Bajranggarh 27, Narwar 3, Hyderabad 30, Indore 26, Rewah 1, Ravashnagar Sagar 1)	761
Maldive Islands	82
Ceylon: (Early kings 78, under Portuguese 1, Dutch E.I.C. 8, under British 128, Independent state 4)	219
East India Company	245
French India	15
Portuguese India	25
Trancobar	5
British India	245
Republic of India	7
Pakistan	9
Assam	282
Nepal	95
Tibet	45
Jayantapura	7
Tipperah	25
Arakan	9
Bhutan	5
Champaran	8
Koch	31
Manipur	19
Pegu	5

THE COIN-COLLECTION OF THE ASIATIC SOCIETY

J. N. BANERJEA

The Asiatic Society was founded in 1784 by the distinguished Orientalist Sir William Jones during the Governor-Generalship of Warren Hastings. The need for a museum of its own was felt as early as 1796, and a modest beginning in this respect was made in 1814. In February of that year, the Society recorded its desire to form a museum 'for the reception of all articles that may tend to illustrate Oriental manners and history, or to elucidate the peculiarities of nature or art in the East'. Among the various heads under which the authorities of the Asiatic Society invited contributions from its members and others, coins formed an important item. It seems that its collection of coins started soon after, and ancient and medieval coins not only of India but also of a few other countries of the world came to find their way to its cabinet.

James Prinsep, then shortly to succeed H. H. Wilson as the Secretary of the Asiatic Society, referred to the contents of the Asiatic Society's small collection in his article published in the first volume of the newly started *Journal of the Asiatic Society of Bengal* (1832). The coin-collection was comparatively poor and there was no proper record of the exact localities in which the coins were found, and even the names of the parties who presented them to the Society were not always mentioned. Prinsep deprecated the usual practice of the British collectors 'to carry their spoil to England where their coins were swallowed up and lost among the immense profusion of similar objects in the public and private cabinets of European antiquarians'. This was according to him not always in the best interest of antiquarian research. He also referred in this connection to the extensive collection of Major Tod, which was not really lost to India, for it came back to the Society 'more valuable than before, through the plates and notes in elucidation of them published in the Royal Asiatic Society's Transacitons' (*JASB*, Vol. I, 1832).

In one of the latest volumes of the *Asiatic Researches* (Vol. XVII) published earlier in the same year, H. H. Wilson, the Secretary of the Asiatic Society at that time, wrote an elaborate article entitled 'Description of Select Coins from Originals or drawings in the possession of the Asiatic Society'. In its introductory portion, Wilson referred to the chief

collections made in India. These were made by Col. Willoughby, Seymour, Dr. R. Tytler, Col. Mackenzie and others, and consisted generally of Muhammadan coins and ancient Roman coins ; the one by Mackenzie comprising 'a few curious Hindu coins, a vast number of copper coins of South India, many modern, some ancient, including Roman coins dug up chiefly at Dipaldinna and Amarāvatī'. Most of these collections that were made in India were sent out of the country, the bulk of the last made by Mackenzie finding their way to the Museum of the India House, London. Wilson, however, recorded that through the liberality of the Government of Bengal 'the duplicates of such as existed in any number of the Mackenzie collection were presented to the cabinet of the Society'. These duplicates formed the chief nucleus of the Asiatic Society's collection which was very slowly enlarged by presentation and purchase. Among the coins described by Wilson (he was helped in this task by James Prinsep) were some belonging to both of them. A glance at the coins reproduced in Plate I accompanying the article shows that among them were gold coins of the Imperial Kushāṇas (Kanishka, Huvishka and Vāsudeva), some of the later and the Kidāra Kushāṇas, several Gupta gold coins (of Samudragupta, Chandragupta II, Skandagupta and Prakāśāditya). Wilson suspected even so early that some of the coins especially forming part of Mackenzie's cabinet were recently fabricated, for their appearance showed that 'they were probably multiplied at Col. Mackenzie's expense from some common original which he considered of great curiosity'.

No catalogue in any form was, however, made of the Society's cabinet at that time, though its necessity was felt by the members from even an earlier period. A little more than a decade after the publication of Wilson's article mentioned above, E. Roer, the then Society's Librarian, prepared a rough catalogue of the coins in its collection, which was published in its *Journal and Proceedings* in 1843 (Part I, pp. 133-56). This shows that the Society's cabinet contained at that time a large number of copper coins (a few only in silver) of the Roman emperors from Augustus down to the destruction of the occidental empire, a few Greek, Indo-Greek and Indo-Scythic and other coins. But Roer rightly felt that the enlargement of the collection of the Roman Series had no direct connection with the avowed purposes of the Society, and 'the collection of the Indo-Grecian, Indo-Scythian and Hindoo coins, in which the cabinet is very deficient, their number amounting only to 116 specimens, most of which are moreover duplicates, and their legends, types, etc. generally effaced, should be enlarged'. He had the

historical sense to observe also that 'the coins of the ancient Hindoo kings allied by their coins to the Greeks and their successors would be of great value in supplying the large blank of historical account, from Aśoka to the Mahomedan conquest' (ibid., p. 135). It is interesting to observe in this connection that this learned Librarian of the Asiatic Society had realised, though imperfectly, even at that early age the importance of Numismatics as one of the valuable sources for historical studies and reconstruction.

The Society suffered a grievous loss shortly afterwards, when all the more intrinsically valuable coins in its collection were stolen in 1844. Freeling gave a description of the collection in its depleted state in the *Journal and Proceedings of the Society*, 1857 (pp. 234-38). A perusal of this note leaves little doubt that inspite of the aforesaid vicissitude, the collection continued to be slowly and steadily built up. There were undoubtedly many duplicates and some worthless coins, but good and interesting coins among them were also not wanting. Freeling like Roer was surprised at the variety of the Roman and Norwegian coins which were, according to him, 'far the largest and most perfect of any'. There were, however, many Indian copper and lead coins, but most of them were unidentifiable at that time because of their very imperfect condition. Freeling, it is interesting to note, emphasised on the proper record of their findspots to be sent when their respective donors were presenting such coins to the Society. Mention may also be made of a large number of silver punch-marked coins, the cast square copper coins, the cock and bull series of copper coins (presented by Captain Hayes,—evidently these are the die-struck Mitra coins of Ayodhyā), silver Indo-Greek coins (a drachma of Demetrius, a hemidrachma of *Zoilus*, 2 of Hermaeus, 1 of Dionysius and 5 of Menander) and a few copper coins belonging to the same series. It is natural that Freeling should complain that the 'Indo-Bactrian Series, is the worst represented of any in this collection. The Indo-Scythian gold (Kushāṇa), the Parthian and Greek were also poorly represented, but in the Roman coins the Society was peculiarly rich'. There was a considerable number of Gupta coins, but there were many duplicates, and some later imitations. These were in gold, copper and silver. Of great interest are some gold coins allied to this set which were found at Jessore and presented by F. L. Beaufort to the Society. These were evidently the coins of the Muhammadpur find described by Allan in his *Catalogue*, pp. cxxvii, 149-50, and plate XXIV, figs. 4-5. The Society's collection was enriched by the presentation of a quantity of large and small Arracan coins, 'very curious and quite unlike any other

Indian coinage,' by T. Oldham in 1856. There was a fairly representative quota of Muhammadan coins in the cabinet, they being divisible into those 'of the Pathans of Delhi, the Pathans of Bengal, the Moguls, and the coins of Ghazni, Khwarism, etc.'.

The authorities of the Society, however, appear to have been on the look out for retrieving the loss it sustained by theft of a good many of its valuable coins. An opportunity for doing this presented itself when the magnificent and representative collection of Col. Stacy was offered for sale in 1856. They decided to purchase the entire set, and Edward Thomas was entrusted with the task of preparing a priced catalogue of it which was published in *JASB*, 1858 (pp. 251-60). The price fixed was nearly Rs. 4000/-, which was made up by the Society's contribution of Rs. 1200/- and the subscriptions of many of its members. As a result of the earnest effort of it and its interested members the fine collection was acquired for its cabinet early in 1859.

It will be of interest here to give a rough idea about the nature of Stacy collection. Thomas's account shows that there were numerous gold, silver and copper coins of Greek, Indo-Greek, Śaka-Pahlava, Parthian, Kushāṇa, Sassanian and different other varieties. This collection also included some local and tribal coins of ancient India, several gold, silver and copper coins of the Guptas, those struck by the Hindu kings of Ohind and a fairly good number of different varieties of Muhammadan coins. The summary appended to Thomas's inventory is worth quoting :

	Gold	*Silver*	*Copper*
Greek, etc. ...	—	352	1,197
Hindu ... (This evidently includes the money of the alien rulers of India, before the Muhammadan conquest.)	70	586	1,208
Muhammadan ...	31	627	1,585
Miscellaneous ...	—	277	384
Total coins ...	101	1,842	4,384

The Society really made a bargain in securing such a splendid collection of as many as 6327 pieces of different varieties of coins at a price which was a little less than Rs. 4000/-. Thomas's exact figure is Rs. 3,960/-, which even in those days of high value of the rupee was undoubtedly a modest sum which the Society paid for the enrichment of its depleted collection.

Since the acquisition of the Stacy collection early in 1859, the accession of coins by the Society's cabinet was not very numerous, its main source consisting chiefly of treasure trove presented by the India Government, supplemented by gifts from private persons (some of them being its own members), and by occasional purchase. Dr. Rajendra Lal Mitra in his account of the History of the Society printed in the *Centenary Review of the Asiatic Society of Bengal* published in 1883 quotes the following about its coin collection : 'It is particularly rich in Delhi Pathans and Bengal Pathans, also in the later Bactrians, Indo-Scythians, Guptas, and the various sorts of ancient Hindu and Buddhist coins. It might be more complete in the Delhi Moghals; but it is most defective in the provincial Muhammadan coinages of Malava, Gujarat, Jaunpur, etc., also in some of the more ancient classes, as the Saurashtrian and Sassanian coins. A small collection of Roman coins in gold was obtained from General Cubbon some years ago. They are of peculiar interest as coming from a trove discovered in the Madras Presidency. Among the copper, lead and inferior coins generally there are a very large number of duplicates. On the other hand, there are also in the Society's collection a few coins which are unique, and a not inconsiderable number which are more or less rare.'

Sometime after the acquisition of the Stacy collection of the Society, the numerous varieties of archaeological and other treasures collected by the Asiatic Society were transferred to the newly opened Indian Museum under Act XVII and Act XXII of 1866-76 of the Legislative Council. V.A. Smith writes in the General Introduction to the *Catalogue of Coins in the Indian Museum*, Vol. I (published in 1906), that coins belonging to the Asiatic Society of Bengal, although now deposited in the Indian Museum, *are still the property of of the Society, and the Act XXII of 1876 requires them to be kept and preserved in the Museum with such marks and numbers as may be necessary for their identification*' (*italics are mine*; p. XVI). This observation of Smith explains why such a large number among the coins catalogued in the three volumes of the *Catalogue of Coins in the Indian Museum* (Vol. I, by Smith himself, Vols. II and III by Nelson Wright) bears the distinctive mark 'A. S. B.'.

This is in short the history of the Asiatic Society's coin-collection. This learned body was one of the pioneers in this matter, and it was possible for it to be so for it had among its members and persons associated with it such eminent scholars and Indologists like H. H. Wilson, James

Prinsep, Alexander Cunningham, Edward Thomas and a host of others who took special interest in systematic numismatic studies. The Society even now has some coins in its own cabinet in its premises. A catalogue of the pre-Muslim Section of this residual collection was prepared by one of its former Research Fellows. Efforts are being made to have the Muhammadan Section of its cabinet catalogued. When the respective catalogues are published, they may be of some use to the students of numismatics.

EARLY INDIGENOUS COINS OF INDIA IN THE COLLECTION OF THE ASUTOSH MUSEUM

CHITTARANJN ROY CHOUDHURY

[Plate XVI]

The coin cabinet of the Asutosh Museum, Calcutta University, is now fairly rich and representative of the early indigenous coins of India, acquired mainly through excavations, explorations and collection since its foundation in 1937. Apart from the coins of common and rare types, the collection includes large number of coins which exhibit several altogether unknown types of great numismatic interest. Already I have been entrusted with the preparation of a comprehensive catalogue of the coins, and would consider it essential to give a brief critical account of them to the scholars, that will comprise only of the coins from the earliest period down to about 100 B. C. This is sure to draw their attention on the vital aspects of the new types that will prove immensely helpful in the correct appraisement of the value of the coins in the Museum.

Among the earliest known indigenous coins in the Museum, mention may be made, first, of the four specimens of single type silver money, commonly known as bent-bars **(Pl. XVI. 1. 1-2)**. They were collected as early as 1940, and the provenance is recorded as the vicinity of the Bhir mound, the earliest city site of ancient Taxila, where, and in its environs, they are mainly found. The coins have justifiably been described as early single type silver, and distinguished from the well-known punch-marked series because, they are stamped only by a single type of mark.[1]

The Museum specimens are well-preserved, and of them two varieties are to be distinguished. Var. *a* consists of the common larger coins, conforming about 178 grains each, stamped with mark 1a **(Pl. XVI. 1B)** on either end of concave obverse, and countermarked by 1b **(Pl. XVI. 1B)** in the centre. The coins of var. *b* are smaller in size, and very rare, only two more specimens being known from the British Museum.[2] These are stamped with mark 2 **(Pl. XVI. 1B)**, a variant of 1a, and belong to a lower denomination.

1. J. Allan, *Catalogue of Coins of Ancient India in the British Museum*, pp. XV–XVII.
2. J. Allan, op. cit., p. 2, nos. 10–11, Pl. 1. 4–5.

The characteristics of the bent-bars have been discussed at length by several scholars.[1] We get no assistance from literature of reference or the date of these coins. But from their provenance the bent-bars appear to have been among the earliest coins of India, and along with a few other silver types, were current in parts of North and North-West India for a time before the end of the fourth century B. C.

Another interesting series of early single type silver currency is suggested by five very small, round silver coins in the Museum **(Pl. XVI. 1. 3-4)**. The provenance of these coins also is one of the early sites of ancient Taxila. Each of them approximates ·20 inch, and weighs about 3·50 grains. The minute coins are neatly stamped by mark 3 **(Pl. XVI. IB)** on one side, and blank on the reverse. Their method of manufacture is apparent—small globules of metal stamped by hammer and anvil process. But due to the tiny size of the coins, only a portion of the mark appears on the flan. Several variants of the mark also may be distinguished.

A few small silver coins of similar type and fabric, found from U. P., and at Thathari (M.P.), are now in the British Museum[2], and seventy-nine more of them are also known from the Bhir mound hoard of 1924.[3] The fact that this series of small coins bears the six-armed mark characteristic of the punch-marked type, has led scholars to attribute them to that coinage.[4] But unlike the bent-bars these are also stamped by a single type of mark, and therefore, may conveniently be linked with the various early single type silvers. The findspots of these coins, however, suggest that they had a wider circulation than the bent-bars from Taxila.

The coins represent the lightest and smallest among the silver coins of ancient India known so far. *Smṛiti*-writers and some ancient texts seem to lay down the *māsha*, weighing two *ruttis*, being equivalent to 3·66 grains troy, as the lowest unit or from of some type of indigenous silver coins.[5] The present type of coins resembles no less in weight and size with the *māshas*, but they differ much in type and technique as well, so that a connection, as suggested by Walsh,[6] is very

1. J. Allan, op. cit., pp. XVI–XVII ; E. H. C. Walsh, *Memoirs of the Archaeological Survey of India*. No. 59, pp. 2–3 ; G. M. Young, *Ancient India*. No 1, pp. 27–32.
2. J. Allan, op. cit., pp. LII, LXIX, 286–7. Pl. XVI. 18–19.
3. *ASR*, 1924–25, pp. 47–48.
4. J. Allan, op. cit., pp LXIX ; E. H. C. Walsh, op. cit., p. 4.
5. L. D. Barnett, *Antiquities of India*, p. 207; *Arthaśāstra*, translated by R. Shamasastry, p. 127.
6. E. H. C. Walsh, op. cit., p. 3.

doubtful. While it is difficult to find their reference in literature, the general type of the coins and their association with the bent-bars and punch-marked coins suggest a date not later than the fourth century B. C.

The large number of punch-marked coins, comprising silver, billon and copper, in the collection of the Museum, have represented the accumulation of about 25 years. Apart from a few that are collected from different ancient sites of India, the majority of them have been acquired either through explorations or from stratified layers in the process of archaeological diggings at Bangarh and Chandraketugarh, Bengal.[1] The collection seems on the whole to be a representative one, as the known published specimens are well represented. But there are some specimens of billon and copper that are known for the first time only from the Museum specimens, and exhibit unique types.

Of the punch-marked silver coins, not to speak of the common varieties, there are sixteen double-obverse pieces, against sixtyfive already known from the Bhir mound hoard of 1924, in an excellent state of preservation **(Pl. XVI. I. 5-6)**. The theory that the variety represents an older coinage, subsequently restamped, is least convincing.[2] The remarkable feature about the punch-marked series, and of the double-obverse coins too, is that, irrespective of their thick or thin fabric, they show no signs of evolution, neither in the type nor in their technique. The double-obverse coins appear to be proof-pieces, struck immediately preceding the minting of more than one variety of coins at a time, and accepted in the circulation as well.

The billon coins are of neat and fine fabric, and bear a group of three marks on the obverse, and blank on the reverse. Of them both round and square shapes may be distinguished, and approximate the same weight as that of the silver type. The very fact that they bear only three marks on them, as also the group which they constitute, is interesting. The most unique of the varieties that may be distinguished from the coins has, on the obverse, marks 3, 4 and 5 **(Pl. XVI. I. B)**. It consists of seven coins, recovered one, during the excavations at Bangarh, and the rest at Chandraketugarh **(Pl. XVI. I. 7-8)**.[3] Mark 4 may convenient-

1. K. G. Goswami, *Excavations at Bangarh (1938-41)*, p. 31. Pl. XXIV ; *Indian Archæology—A Review*, 1956-7, p. 30 ; 1957-8, p. 51 ; 1958-9, p. 56 ; 1959 60, p. 51.
2. E.H.C. Walsh, op. cit., p.
3. K. G. Goswami, op. cit., p. 31 ; *Indian Archæology—A Review*, 1957-58, p. 51.

ly be identified as the representation of a ship, which is, however, mistaken as a 'bag'.[1] It is single-decked, the rear part of which delineates the form of that of a dolphin, with a full treatment of its snout in the front. The form of the ship is evidently archaic, and unrivalled, as it has no parallel in the repertory of the ship-motifs of ancient India. We have no evidence that these and the other billon coins are known from outside of Bengal or disseminated as widely as the silver type, and one does not expect base metal coins to travel far from the place of their origin. These are then most likely the local coins of ancient Bengal, obviously invented for fractional transactions, some of which probably indicative of the sea and riverine commerce of its early days.

The collection of twenty-one punch-marked copper coins in the Museum were unearthed during the excavations at Chandraketugarh from the same stratum which yielded the silver type. These are replicas in copper of the punch-marked silver coins, and are of equally neat and fine fabric **(Pl XVI. I. 9).** The type, for the first time known from the present specimens is quite distinct from the heavy and dumpy coarse coins in the British Museum,[2] stamped with a group of five common marks on one side and single or blank on the other. In weight the coins closely approximate the silver type, but evidently betray a lower denomination. The frequent references in the old texts to copper *kārshāpaṇas*, along with the silvers, probably include the punch-marked copper coins as well. Although, referred to in the literature, the wide circulation of the *kārshāpaṇas*, and the known distribution of their silver counterparts, we have, unfortunately, no information about finds of this series of punch-marked coins excepting of the present specimens from Bengal, inadequate enough for forming a comprehensive idea of the coinage.

The extensive collection of uninscribed cast copper coins, acquired mainly through archaeological methods represent two new series of coins, besides the common varieties. Both of them have come through the excavations at Chandraketugarh, during the year 1960-61, from a stratum which is datable to about first century B. C. Series *a* consists of four coins, bearing on the obverse a galloping horse with a plain reverse. Their size is of the average cast copper pieces and weighs about 50.25 grains. The galloping-horse motif is very rare on early Indian coins, and only a few large punched

1. K. G. Goswami, op. cit., p. 31.
2. J. Allan, op. cit., pp. LXXVIII-LXXIX. 101-116. Pl. XII-XIII.

copper pieces from Eran bear the device.[1] If further specimens are recorded from the site, it is just possible to attribute the local origin of the type. The three coins of the series *b*, of the same size and fabric as that of the coins of series *a*, with plain reverse, has one of the most remarkable types in the ancient Indian coinage—an elephant, standing, facing within a *toraṇa*. Apart from the symbolisms that may be readily recognizable from the type, the coins possibly bear the earliest numismatic reference of a secular architecture of ancient India, a gateway, perhaps of the fortified city of Chandraketugarh, vestiges of which have already been traced during the excavations.

1. J. Allan, op. cit., pp. XC-XCI. 141-42. Pl. XVIII. 7 & 11.

THE COIN-COLLECTION OF THE BARODA MUSEUM

B. L. MANKAD

I

Gold Coins

The coin cabinet of the Baroda Museum contains 270 gold coins and medals and includes the coins of the Kushāṇas, Guptas, Sultans of Delhi and Malava, Mughal emperors, ancient and medieval South Indian coins, later coins of Indian States and foreign coins including Roman, Byzantine, Arabian, as well as later coins of England, France, U.S A., Germany and other places.

EARLY INDIAN COINS

The oldest set of coins in the Baroda Museum comprises six Kushāṇa coins. Of these, one belongs to Vima Kadphises (85-120 A. D), three to Huvishka (150-180), one to Vasudeva (185-220) and one to Vasu (ca. 200 A.D.).

The Gupta dynasty is represented by a Standard type coin of Samudragupta, a Horseman type of Chandragupta II and three Archer type coins of Kumāragupta. These coins range from 326 to 455 A D.

Of the early indigenous coins from the South, mention may be made of two spherules, one of which was found from the Bijapur district; two early Chalukyan coins with punches and a boar; two coins with punches and the word *Vijaya*; one *Padmataṅka* of the Banwasis of Tanjore and one Kadamba coin with lion and punches. These are of special interest, as they are all found from Nellore. These can be assigned to ca. 6th-7th centuries.

COINS OF MEDIEVAL DYNASTIES

The medieval dynasties of Central India are represented by one coin of Gangeyadeva of the Kalachuri dynasty (1015-40 A.D.) of Western Chedi and two coins of the Haiheyas of Eastern Chedi of which one belongs to Prithvideva (1140-60) and the other to Jajalladeva (1160-75). Both the Haiheya coins are from Dulahisconin in the Raipur district.

Northern India is represented by nine coins of two dynasties. One belongs to Mahipaladeva (1103-28) of the Tomara dynasty of Ajmer and the remaining eight to the Rathod dynasty of Kanauj—six assigned to Govindachandradeva (1112-60) and two to Prithvideva.

The South India and Western dynasties are represented to a greater extent. There are five coins of Jagadekamalla of the Western Chalukya dynasty of Kalyani (1st half of 11th century) of which one is from East Khandesh and one from Nellore. One coin of the Silahara dynasty (11th century) is found from the Nasik district. The Yadavas of Devagiri (1187-1311) are represented by three *Padmatankas*, the findplace of one of which is stated to be Panvel in the Kolaba District. Besides, there are three fanams of Ananta Varma Chodagana (1075-1146) of the Ganga dynasty of Kalinga, and two Gajpati Pagodas found at Dharwar and one Vishnu Pagoda found at Phaltan. These Pagodas are anonymous coins not assignable to a particular king but probably coming from Orissa and belonging to 15th century.

VIJAYANAGARA KINGDOM

There are 30 coins of the Vijayanagara kingdom which are described in a tabulated form below :

King	Period	No. of coins	Findplace if recorded
Hari Hara II	1379–1406	4	—
Deva Raya II	1422–47	13	One found at Elshi in Chanda District and one at Nandur in Junnar Taluka.
Krishnadeva Raya	1509–30	4	One found at Phaltan in Satara District and one at Nattaki in Guntur District.
Achyuta Raya	1530–42	2	One found at Phaltan.
Sadasiva Raya	1542–73	4	One found at Manipur in S. Konkan, one at Honover (Kanara Dist.) and one at Kharegaon in Ahmadnagar Dist.
Rama Raja	1565	2	One found at Coimbatore.
Venkatesvara	1600	1	Kurnool District.

TRAVANCORE–COCHIN ETC. FANAMS

There are two dozen Fanams of Travancore, Cochin etc. Sixteen of these are Vira Raya Fanams, the findplace of one of which is recorded as Coimbatore. Of the remaining eight, four are found from Tinnevelly and Chingleput and one belongs to a king of Cochin.

INDO-MUSLIM AND MUGHAL COINS

The oldest set of Indo-Muslim coins in our cabinet is formed by eight coins of Allauddin Muhammad Khilji (1295–1315). Amongst other coins of the Delhi Sultanate are three coins of Ghiyasuddin Tughluq (1320–25), six of Muhammad Tughluq III (1325-51) and one of Sher Shah Suri (1540–45).

There are only two coins of the Sultans of Malava—one of Ghiyas Shah Khalji (1469-1500) and one of Mahmud Shah Khalji (1510-1531).

The Mughal dynasty is fairly represented. The earliest of these is a gold coin of Akbar dated 973 A.H. (1565/6 A.D.). In all, there are eleven coins of Akbar minted at Ahmedabad, Agra, Lahore, Jaunpur and Urdu Zafar Qarin (i. e. issued from a camp). Of the Zodiac coins of Jehangir, those with the symbols Leo, Gemini, Taurus, Sagittarus, Aries and Pisces are found in the collection. There are two coins of Shahjehan minted at Akbarabad, one of Shah Alam I minted at Burhanpur, three of Muhammad Shah and two of Ahmad Shah all minted at Shahjahanabad, half-mohur of Alamgir II minted at Arcot, three mohurs, one half-mohur and and one quarter-mohur of Shah Alam II minted at Murshidabad and one Mohur minted at Ahmadnagar.

LATER INDIAN STATES

The earliest in the series is a coin of Haider Ali of Mysore (1761-82). It is interesting because it was copied from the Pagodas of Sadasiva Nayaka of Ikkeri. Thus, whereas on its obverse we find the initial Persian letter ح of Haider Ali's name, the reverse shows an image of Śiva-Pārvatī seated. This can be said to be the numismatic evidence of the historical fact that Haider Ali tolerated image worship.

Next in order are the two coins of Maharaja Savai Ram Singh of Jaipur (1835-80), with Persian legend, typical six-branched "Jhar" and the mint-name Jaipur in Persian ; one 100-Keri coin of Pragamalji of Cutch (1860-75) ; four coins of Raja Rama Varma of Travancore (1860-80) ; two coins of Malhar Rao Gaekwar of Baroda (1870-75) and two coins of the Nizams of Hyderabad belonging to the last quarter of the 19th century.

FOREIGN COINS

Some foreign coins also are interesting. The oldest piece in the collection is a Roman coin of Theodosius II (405-424 A. D.) ; the obverse has a portrait of the emperor in military costume with the legend *Dominus Theodosius Pater*

Patriae Augustus (The Lord Theodosius, the august father of the country); the reverse represents the emperor enthroned. The Byzantine coins of the sixth century still follow the Roman tradition. That of Justinus (518-527) shows the portrait head of the emperor in the same manner on the obverse, whereas the reverse is occupied by the image of the angel (goddess) of victory. The other, of his successor Justinian I (527-565), hardly differs from it, except for the legend. Both were struck at Constantinople (CON) of refined gold (OB = obryzium). The next two coins, of very thin material, fall into the closing of the 11th century. One, of Michael IV, the Paphlagonian (1034-1041), has on the obverse the bust of the emperor, in the later pompous costume, a sceptre in the right and a globe topped by a cross in the left hand, whereas the reverse is occupied by the bust of Christ. Another, of Constantine IX Monomachos (1042-1055) differs only in the legend. The next coin of Manuel I Commenus (1143-1180) shows the emperor in full-size figure, but the legend is difficult to read. After the Roman-Byzantine, five early Arabic gold coins must be mentioned which belong to the Abbasid and Fatimid Khalifas.

The last group of ancient gold coins comprises four ducats from Venice, with St. John the Baptist and the legend SM (Sanctus Marcus) Veneti (Venice) on one, and the figure of the enthroned Christ on the other side. Two, of very poor execution, may possibly be ascribed to the Doge Pietro Gardenigo (1289-1311), two others bear the name of Alvise Mocenigo (1763-73).

The rest of the foreign coins is of comparatively modern date (17th to 20th centuries). Among these may be mentioned coins of Charles II, James II, William III and Mary, George II and III, Queen Victoria and Edward VII of England. These are of various denominations and number about two dozen.

The cabinet possesses one ducat of king William I of Holland, seven coins of various denominations of Napoleon II of France, two 20-Mark pieces of the emperor William I of Germany, 20-Mark coin of Ludovic II of Bavaria, two gold coins of President Kruger of the Transvaal Republic (South Africa), one of the Republic of Costa Rica, 10 U. S. A. Dollars, or its multiples or parts, half-Sovereigns of Australia with the portrait of Queen Victoria. A Hungarian 10-Crown piece of the Austrian emperor Francis Joseph (1905) is the latest coin in the whole collection.

There are also an early Indo-Portuguese gold coin, and several fine pieces struck by the East India Company, one side

still in the beautiful Mughal style, the other with several variations of the British coat-of-arms. They are Ashrafis (Mohurs), half-Ashrafis, further one two-Ashrafi piece and a five-Rupee piece in the name of William IV. Turkey is represented by Sequins and Majidis (after sultan 'Abd-ul-Majid, 1839-61) of the years A. H. 1265, 1277, 1293 (A. D. 1838/9, 1860/I, 1875/6). Finally, there are also two Japanese and one Chinese gold coin of the last century.

II

Coins of Silver, Copper and Other Metals

The coin cabinet of the Baroda Museum contains about 10,000 coins of silver and more than 7000 of copper, billon, potin, lead, brass etc. These range from the punch-marked coins down to the coins of the 19th century.

Of these, about 1100 silver and 1000 copper coins belong to the Gaekwars of Baroda. They range from Ānandarāo Gaekwār (1800–1819) down to Sayājīrāo III. Coins of Mānājīrāo Gaekwar hitherto unknown and published for the first time in the *Journal of the Numismatic Society of India* (XXII, pp. 285 ff) and also some new types of Sayājīrāo II are of special interest in this group.

Another large group is formed by the coins unearthed from the Gohilwād Timbo at Amreli during excavations carried by the Archaeological Department of the former Baroda State in 1935. In this group, there are about 1400 coins of Kumāragupta I, about 150 square lead coins of Swāmī Rudrasena III, another group of about 200 similar coins but not readable, about 300 ancient copper coins which include a few Māshakas, rest being cast and tribal coins most of which not exactly identified.

Of the remaining coins, about 4000 are purchased mainly from A. Bhikaji & Co., Bombay, but a few from Krishna & Co., Lucknow and from other dealers also. About 500 coins have been received from the Government Museum, Madras ; Provincial Museum, Lucknow ; Central Museum, Nagpur and others, perhaps by way of distribution of treasure trove finds.

The cabinet contains about 1500 silver and 1200 copper coins of the Mughals ; about 2000 billon, 100 copper and 50 silver coins of the Delhi Sultanate, and about 150 silver and 1400 copper coins of the Gujarat Sultans. Large number of these have been dug out from the foundation of buildings etc. in various parts of the former Baroda State and have been collected and presented to the Museum by the officers of the P. W. D. or revenue departments.

I shall now proceed to give some details of the whole collection under suitable headings.

PUNCH MARKED COINS

There are 94 punch-marked coins—87 of silver and 7 of copper. One of these is a silver bent bar of the Taxila variety. There is only one pre-Mauryan silver coin collected from the ancient site of Kamrej. Another silver coin picked up at Kamrej is rather of a rare and interesting type, as it has the figure of an owl as one of the symbols on the obverse. On the whole, 8 silver and 7 copper coins were picked up at Kamrej 58 silver coins were transferred to the Museum in 1895 from the Hazur Treasury of the former Baroda State. These must have formed part of a hoard. All these are thick, squarish or rectangular pieces and datable to about 300 B. C. 7 silver coins of well-known varieties were received from Navasari whereas the remaining 13 coins were either purchased or received as treasure trove finds from various parts of India. 2 of these are of globule fabric (purchased), seven thick and square made of sheet cuts are from the Mangrul hoard, one of Mauryan variety from the Mambalam hoard and three coins of known varieties received from the Archaeological department of Gwalior State.[1]

EARLY INDIAN COINS

Of the foreign dynasties who ruled over India before and in the early centuries of the Christian era, we have about 60 coins of Indo-Greeks (Eukratides in silver, Antialkidas in copper, Apollodotus and Menander in both and Hermaeus in copper), Indo-Scythians (Maues, Azes, Azelises), Indo-Parthians (Gondophares, Soter-megas) and Kushāṇas (Kadphises I, Kadaphes, Huvishka and Vasudeva) all in copper. Interesting of these are a copper coin of Kadaphes with a seated image of Buddha and figure of Zeus, a copper coin of Huvishka seated right with both legs thrown down, bow in extended right hand on obverse and sun god on reverse. Besides these, there is one unidentified coin very similar to a coin of Vijayamitra's son with mounted king and standing deity published on p. 168 of Whitehead's *Catalogue of Coins in the Punjab Museum, Lahore* (Vol. I).

The Kshatrapa coins are well represented. There are copper coins of Bhūmaka, Dāmasena, Vijayasena and Jaya-

1. For fuller details of our punch-marked coins, interested readers are requested to refer to P. L. Gupta's article, "Punch-marked coins in the Baroda Museum" in Vol. X-XI of the *Bulletin of the Baroda Museum*.

dāmā and silver coins of Nahapāna, Rudrasena I, Dāmasena, Vijayasena, Rudrasena II, Bharṭṛidāmā, Svāmī Rudrasena III, Viradāman, Viśvasimha, Viśvasena, and Yaśodāmā. Besides, there are about 150 square lead coins of Svāmī Rudrasena III of which about 40 look like copper. Of these, the coins of Bhūmaka are rare and several coins of other Kshatrapas are dated. One coin of Nahapāna was found at Jetalpur (Baroda District) together with a silver coin of Apollodotus.

Of the Andhras, we have about a dozen lead circular coins of Śrī Sātakarṇī, Śrī Yajña Sātakarṇī, Pulumāvi and Śrī Sātā.

The Guptas ruled over this region for a long period and naturally we have a very large collection of about 2800 silver coins and 120 copper coins of Kumāragupta I and a few silver coins of Skandagupta. These are found in large hoards from the Gohilwād Timbo of Amreli and from foundations of buildings in Kodinar.

The Valabhī dynasty, having its capital at ancient Valabhīpur (modern Vala in Saurashtra), is represented by about 80 silver and one copper coin. The silver coins are of various types (with trident only, or combined with battle-axe etc.) and legends; and can be attributed to Śrī Bhaṭṭārka and others.[1]

We have about 200 early indigenous copper coins of India. These contain two Māshakas, several cast coins of Taxila of various types, tribal coins mostly from Ujjain but one assignable to Audumbaras and three to the Malavas. Interesting are the coins with inscription *Jishṇu* in Brāhmī on one side and a wheel on the other side. We have about a dozen such coins.

There are about 50 coins of the Nāgas of Padmāvatī. Most of these were received from the Archæological department of Gwalior State, some purchased from dealers and a few picked up from surface at the actual site of Pawāyā. Deva Nāga, Skanda Nāga, Bṛihaspati Nāga, Gaṇa Nāga, Bhava Nāga, and Vibhu Nāga are represented. Of special interest is a coin of Gaṇa Nāga with a huge bulky bull of new type, more weight (35 grs.) and thicker fabric and a coin of Bhava Nāga with an active trotting bull to the left instead of right.

1. For fuller details of the Valabhī coins in the Baroda Museum, interested readers are requested to refer to the paper "Valabhī Coins in the Baroda Museum," in *JNSI*, XV, pt. I.

The medieval dynasties are very poorly represented, though a few coins which we have are all interesting or rare. There are about a dozen billon coins of Bhojadeva I of Kanauj. There are five copper coins of Nāiwār of which one is of Malayavarmadeva and four not exactly assignable.

There is one coin of Sāmantadeva of Kāngrā and one of Sāmantadeva of Ohind. However, eight electron coins of Lalitāditya Muktāpīḍa of Kashmir (ca. 700 A.D.) and five copper coins of the Hindu kings of Kashmir (ca. 950 to 1155 A.D.) are rather rare and interesting. There is also one copper coin of Rāja Rājā Chola.

Coins known as Gadhaiyās were prevalent in Gujarat and Rajputana from ca. 750 to 1100 A.D. These are the crude imitations of old Sassanian coins, with lines and dots which represent the old Sassanian fire altar. There are about 1500 silver and 200 copper Gadhaiyā coins, though silver is of very base sort in most cases. These include thin, thick as well as medium fabric coins. The cabinet also possesses about a dozen silver early Sassanian coins and it is interesting to compare the Gadhaiyās with these coins and to study the degeneration of the fire altar. The Gadhaiyā coins were found in the village Jhagad in Sinor Taluka, at Patan, Karvan, etc. Early Sassanian coins were found at Vadavali in Jetalpur in Baroda District.

COINS OF MUSLIM PERIOD

We have quite a large number of coins of the Delhi Sultanate and of Gujarat Sultans; also a few of the Sultans of Malava, Jaunpur and Kashmir; of the Bahamani Kings, Adilshāhī coins of Bijapur and coins of the contemporaries of the early Sultans of Delhi.

The following kings are represented:

Muhammad Bin Sam (billon), Tajuddin Yaldaz (billon and copper). Shamsuddin Altamash (billon and copper), Jalaluddin Raziya (billon), Alauddin Masud Shah (silver), Nasiruddin Mahmud (silver and billon), Ghiyasuddin Balban (all metals), Firoz II (billon and copper), Alauddin Muhammad Shah II (all metals), Qutubuddin Mubarak (copper and billon), Nasiruddin Khusru (billon), Ghiyasuddin Tughluq I (billon), Muhammad III Tughluq (all metals), Firoz III (billon), Bahilol Lodi (copper), Sikandar Lodi (copper), Sher Shah Suri (copper), Islam Shah (silver and copper), Muhammad Adil Shah (copper) and Sikandar Suri (copper).

Billon coins form quite a bulk of these and number about 2000.

Of the contemporaries of early Sultans of Delhi, we have billon coins of Nasiruddin Qubacha of Sind, of Al-hasan Quarlagh of Ghazni, and of his son Muhammad who succeeded him in Sind. These coins are all rare.

Malava Sultans are represented by a silver coin of Mahmud Shah Khalji II and copper coins of Hoshang Shah and Ghiyas Shah Khalji ; Kashmir Sultans by the copper coins of Ibrahim Shah and Husen Shah ; Bahamanis by the silver coins of Muhammad Shah II, Firoz Shah and Muhammad Bin Humayun and copper coins of Ahmad Shah II and Kalimullah Shah ; and Jaunpur Sultans by the copper coins of Ibrahim Shah.

Interesting is a new type of copper coin of Ghiyasuddin Balban. The obverse has the inscription *Al Sultan Alla Azam* in Persian, while the reverse has the name Balban in Persian in centre and श्री : सुलतां गयासुदीं around. Such a reverse is not seen on other copper coins of Balban.

Every Gujarat Sultan whose coins are known is represented in our cabinet, but silver coins of only Mahmud Shah I, Muzaffar Shah II, Ahmad Shah III and Muzaffar III are available. Ahmad Shah I and Mahmud I have a large number of copper coins (about 300 and 350 respectively), Muzafar II and III have about 200 each, Muhammad II and Mahamud III about 100 each, Ahmad Shah III about 70, while Ahmad Shah II and Bahadur Shah about 25 each.

A large hoard of billon coins of Delhi Sultanate weighing 14 lbs. was found at Dhārī in Saurashtra. Billon coins of the Tughluqs have been found at Patan, Navasari, Vadavali, Modhera etc. and those of Gujarat Sultans at Vijapur and Kalol in Mehsana Dist., from L. V. Palace area and several Takias at Baroda, at Kodinar in Saurashtra and a few at Kamrej.

The coins of Mughals are present in various types, denominations, mints etc. However, only Akbar, Jehangir, Aurangzeb, Jahandar Shah, Alamgir II, Shah Alam II and Akbar II are represented by copper coins ; those of Akbar are in large number and belong to mints Ahmedabad, Narmol and Agra.

Of silver coins, Akbar has about 500 coins of which about 250 are of Gujarat fabric, many minted at Ahmedabad etc. and one of Urdu Zafar Karin. Of about 30 coins of Jahangir, one contains the name of Nurjehan, rest are of Ahmedabad and one of Kandahar mint. Shahjehan has about 170 coins of various mints like Patna, Tatta, Multan,

Golconda, and others Of 200 coins of Aurangzeb, of 17 different mints, those of Junagadh, Haiderabad and Sholapur are rather rare. Muradbaksh has only five coins of Surat and Ahmedabad, and Shah Alam I only seven of Surat mint. Rafiuddarjat has only two of Shahjehanabad and Jahandar has three of Surat.

There are about 40 coins of Farrukhsiyar of seven mints including Cambay, Etawah and Burhanpur. Muhammad Shah has about 200 coins of 18 mints including Azimabad, Kora, Katak, Gwalior, Islamabad etc., while Ahmad Shah has only three coins of Ahmedabad and Katak. Of about 40 coins of Alamgir II, 15 are minted at Surat, and one at Aurangabad. Shah Alam II has about 180 coins of about a dozen mints like Aurangnagar, Ujjain, Asafnagar, etc., and Akbar II has only about 30 of mints Ahmedabad, Haiderabad and Ujjain.

Coins of Akbar have been found at Baroda proper, Patan, Dangarwa (Mehsana Dist.), a silver coin of Shahjehan at Vyara, one of Farrukhsiyar at Songadh. Methali in Karjan Taluka, Sakhpur in Damnagar (Saurashtra), Sinor Taluka, and Amalpur in Navasari district are other places where the Mughal coins are found.

COINS OF NATIVE STATES

The coins of Gaekwars naturally form a bulk of these. Largest number of silver coins in the cabinet belong to Ānandrāo (about 850) while his copper coins are only in odd numbers. Sayājīrāo II has about 50 silver and a dozen copper coins. Ganapatrāo has only a few coins in copper and silver. Khanderāo has more than 300 in copper and a dozen in silver. Malhārrāo has about 600 copper and only a few silver, while Sayājīrāo III has about 300 in copper and two dozen in silver.

Interesting are about a dozen silver and a few copper coins of Mānājīrāo as these are known for the first time from our collection. Also, copper coins of Sayājīrāo II with a ball in the centre, or with a flower, are of new type.

The copper coins of Ganapatrāo minted at Amreli and received in exchange from tha Prince of Wales Museum, Bombay, are of special interest.

Of the other Native States, there are more than 250 coins in silver and about 200 in copper. Of the States in western India and cities around Bombay, Kutch, Nawanagar, Junagadh, Porbandar, Radhanpur, Lunavada, Cambay, Chhota Udaipur, Satara and Poona are represented. Copper

coins of Jorawar and Bismilla of Radhanpur, being thick, dumpy, irregular pieces, blank on reverse and impressed with the initial letter of the ruler's name in Nāgarī on obverse are rare and interesting. Ranashahi coins of Porbandar and those of Shias of Cambay are rare.

The States in Rajputana are represented by Alvar, Jaipur, Jodhpur, Banswara, Bikaner, Udaipur, Pratapgarh and Tonk; thosein central India by Bhopal, Dhar, Gwalior, Indore, Ratlam and Sailana. Coins of Dule Singh of Sailana with a sword and trident, of Laxmansingh of Banswara with solar symbols and traces of Nāgarī legend and of Tukojirāo with a bull facing a *liṅgam* are noteworthy.

Of the States in south India, we have coins of Travancore-Cochin, Mysore, Pudukkotai and Hyderabad. There are silver fanams of Travancore and Cochin, copper coins of Tipu and Krishṇa Rājā Wodeyar of Mysore, copper coins of Pudukkotai with seated Pārvatī and legend *Vijaya* in Telugu and silver and copper coins of the Nizams of Hyderabad.

Assam is represented by a silver coin of Rājeśvara Siṁha (1751-69) and Brijanāth Siṁha dated 1818 A.D., and Tipperah by a silver coin of Rām Siṁha Māṇikya (1806). Nawabs of Oudh are also represented by about fifty silver coins of Muhammad Ali Shah, Amjad Ali Shah and Wajid Ali Shah.

FOREIGN COINS

There are about 600 coins of the foreign countries—300 in silver and 300 in nickel, brass, copper and other metals. Of these the collection of about 70 ancient Greek and Roman coins is of great interest. These range from 478 B. C. to 283 A. D. and include the ancient Greek coins of Rhodes, Syracuse, Athens, Myrina, Lampsacene Stater, coins of Histiaea, Epaminondas and Ptolemy I. These are all in silver. Of the ancient Roman coins, silver or copper coins of the following emperors are available:

Nero (Liberty type), Titus Flavius Sabinius Vespasianus, Dominitianus T. Flavius Augustus, Severus L. Septimus, Lucius Verus (Victory type), Commodus L. Aurelius, Marcus Auralius Antoninus, Philippus. I. M. Julius, Alexandar Severus, Gordianus III. M. Antonius, Balbinus Decimus Caelius, Trajanus Decius, Postumus M. Cassianus Latinius, and Carus M. Aurelius.

The rest of the foreign coins are much later and belong to Japan, China, Persia, Turkey, and to England, France, Italy, Germany, Prussia, Belgium, Switzerland, Spain,

Holland, U. S. A., Russia, etc. Also there are the Dutch and Indo-Portuguese coins, the coins of French Indo-China, Strait settlements, Mauritius, Sarwak, Mombasa, Singapore, Burma, Ceylon and of the East India Company, German, East Africa Company, Dutch East India Company and coins of various Republics.

Of these, silver coins (5000 Dinars) of Kajar Nassiruddin Shah of Persia, a coin of Saiyad Ali bin Umar of Persia published in 1308 Hijri under French Protection, silver Paras of Egypt dated 1293 A. H., Piasters of Turkey and Constantinople, set of old Chinese and Japanese imitation coins, Japanese candareens of Kwang Tung Province, and silver Chinese Muscals of Kashgar dated 1310 A. H. are interesting. Interesting is also a set of paper currencies of the Confederate States of America (1862–64).

More interesting is ancient base metal currency of Nigeria called Manilla money, pieces of ancient shell currency of Caroline Islands and shell money of ancient Carib and an iron rod used as currency in Mendiland.

MISCELLANEOUS (MEDALS ETC.)

In addition to this collection of coins, there is a large collection of copper medals including the sets by Barre, J. Wiener, Durand and Dassier de Vreese. Also, there are Indian and foreign war medals of various types, military medals, commemoration medals, medals struck on special occasions by Sayājīrāo III Gaekwar of Baroda, and prize medals obtained for Baroda at various exhibitions.

There are a few religious medals and temple coins, including a few Ramatanki Coins, but interesting is one Krishnatanki coin.

Lastly, a lead seal with the imprint of a Greek horse found at Navsari is of historical importance, as it throws light on the foreign contacts of India in early times.

A LIST OF INDIAN COINS IN THE COLLECTION OF THE STATE MUSEUM OF BERLIN[1]

A. SÜHLE

	Æ	Æ	Æ
1. Nord-westl. Indien			
SATAVAHANA-DYNASTIE :			
Krishnaraja		1	
KSATRAPA-DYNASTIE :			
Nahapana		22	
Damaśena		3	
Vijayaśena		8	
Rudraśena II		5	
Viśvasinha		3	
Viśvaśena		4	
Rudrasinha		3	
Aśa Daman		2	
Rudraśena III		3	
Bhartṛdáman		2	
GUPTA-DYNASTIE :			
Chandra Gupta II		2	
Kumara Gupta		68	
MUGHAL-DYNASTIE :			
Babar		9	
Humayum	8	9	
Akbar	79	239	
(ca. 110 Nachprägungen)			
Jehangier (Salim)	24	65	6
Nur Jehan		6	
Shah Jehan	32	160	25
Aurangzeb	21	125	71
Kutubuddin	3	9	
Jehandar Shah	2	8	
Mohammed Ferruch	5	46	

1. [This list is being printed in the form as submitted by Professor Suhle.—*Editor*]

	AV	Æ	R
Rafi'eddargát	1	6	
Rafi'eddaulat	1	4	
Mohamm. Shah	41	107	8
Ahmed Shah	6	17	6
„ „ *später M. m. seinem Namen*	1	4	
Shah Alam-girjani	7	27	3
Shah Jehan II	1	8	
Shah Alem II	7	14	
Mohamm. Badzbaht		1	
Akbar II	3	14	12
Bahadur Shah			3
LOKALPRĀGUNGEN UNTER D. MOGHULKAISERN			
Agra H. 936		25	
Gaunpur H. 939		8	
Lahore H. 938		2	
Delhi H. 941		6	
AGRA/ZODIAKALMÜNZEN H. 1028	45	29	
2. Westl. Indien			
Kabul			
Sri Varkadeva			54
Sri Syalapatideva		5	5
Sulfatideva		12	13
Sri Samantadeva		60	42
3. Kaśmir (Rajas)			
Sundar varman			9
Gopala deva			14
Sughanda devi			14
Chakra verma			1
Unmatti verma			1
Kshema Gupta			5
Nandi Gupta			2
Tribtuvana			1
Sri Didda deva			36
Sangrana deva			30

	Æ	Æ	Æ
Ananta deva			9
Kalasa			16
Harsharaja			25
Jaya Sinha			6
Jaja Deva			7
4. Kaśmir (Sultane)			
Semsshahmir		1	
Sikander			2
Haidar Shah			2
Hassan Shah	1	1	17
Mohamm. Shah	1	2	13
Fath Shah	1	1	13
Nadir Shah		1	1
Ibrahim		1	8
Hussain Shah Shak			6
Juruf			1
Mohamm. Ali		1	1
5. Süden			
KACH (Cutch)			
Bharmalji		1	
Bhojraji		1	
Changarji II		1	
Tamacherji		1	2
Rayduni I			2
Pragji		1	
Joharji I		1	7
Lakhapati		3	
Raydinji II		2	7
Barmalji II		2	3
Decalji II	1	17	10
Pragmalji II			20
Chengarji III u. Victoria (1876)		2	11
6 Gugirat (Sultane)			
Ahmed I		2	34

	Ⱥ	Æ	Ꞧ
Mohamm. Shah			8
Mahmud Shah		10	61
Muzaffar Shah II			5
Bahadur Shah			23
Mahmud III	1	10	16
Ahmed II		4	15
Muzaffar Shah III	1	7	13
Mahmud Shah		1	
SURAT	2	19	5
Ahmednagar		1	2
Satara			3
MAISUR			
Haider Ali	3		
Tipu Sahib	2		
Patan	5	22	33
Bangalur			7
Farochi			1
Fais-hisar			6
Ferchâb-hisar			7
Kalikut	2		1
Nagar	1		13
Kriśna Raja (1799--1817)	12	11	
Maisur	4		40
MADRAS I ARKAT	14		8
Madras-Rupie		29	
DEKKAN KÖNIGE			
Firuz Shah		12	5
Ahmed Shah			6
Alaedin Ahmed II			21
Humayum Shah			4
Mohamm. Shah II	1		4
Mahmud Shah	1	1	

	Ⱥ	Ɽ	Æ
CEYLON			
Sri Parákrama Báhu	3		18
Sri Vijaya Bahu			8
Sri Ragā Litáváti			19
Sri-Mat Sahasa Malla			22
Sri Dharmaṣoka Deva			5
Sri Bhuranaika Bahu			7
Gwalior			14
Kota	4		5
Mewar		10	
MALWA			
Huśang Gori			11
Mahmud Chilgi	4	15	21
Gijateddin Chilgi	6		39
Mazir-eddin Chilgi	1	2	25
Mahmud II		1	56
Ugên			6
Partabgarh		8	
Bikanir			
SAGUR		3	31
Kukuzeti in Bandalkhand			31
Gangesländer			32
Bundi			47
Indore			14
Indore mint ind. Schrift			16
SŪLTANE VON DELHI (H. 589-602)	4	6	54
Tageddin Ilduz (Statthalter)		3	25
Aramśah (H. 607)			1
Sēmseddin Altamish (H. 607-633)	1	19	50
Roku eddin Firuz Shah			4
Ridija (H. 634-637)		1	3
Behramshah (H. 637-639)		2	13
Alaeddin Musud Shah (H. 639-644)		9	27
Mahmud I (H. 644-664)	1	26	21

	AV	Æ	R
Balban (H. 664-685)	4	21	33
Kaigobâd (H. 686-689)		7	14
Firuz Shah II (H. 689-695)	2	15	41
Alaeddin Mohammed (H. 695-716)	11	47	86
Qutbeddin Mubarek Shah (H. 716-720)	2	1	38
Nazireddin Chosru (H. 720-1320)	1		2
Tuglaq Shah	4	10	36
Mohamm. ibu Tuglaq (H. 725-752)	22	18	51
Kupfermünzen mit Zwangskurs			120
MÜNZEN, GEPRAGT IM NAMEN DES ABBASSIDISCHEN KALIFEN :			
el Mustakfi II Suleiman (H. 701-40)	4		2
el Hakim Ahmed (H. 741-753)	5		25
Tuglaq Shah	3		
Tiruz Shah III (H. 752-799)	8		96
Feth Shah	3		15
Zafar	2		8
Tuglaq Shah II (H. 790-791)	1		8
Zafar Chan			16
Mohamm. Shah ibu Firuz (H. 792-795)	2		34
Sikander Shah			7
Mahmud Shah II (H. 795-815)	1		30
Nasrat Shah			7
Mubarek Shah (H. 824-837)			17
Mohamm. Shah IV. ibu Ferid (H. 837-847)			28
Buhlôl Lôdî (H. 855-894)			54
Sikandar Lôdî (H. 894-923)			
Sher Shah (H. 946-952)	3	67	66
Islam Shah (H. 952-960)		46	47
Mohamm. Adil Shah (H. 960-961)		6	11
AUDH			
Gazieddin Haidar (H. 1229)	4	15	2
Nasreddin Haidar (H. 1242-1252)	1	15	2
Mohamm. Ali (H. 1252-58)	3	6	11
Amgâd Ali (H. 1258-1265)		13	5

	AV	ÆE	AR
Wagîd Ali (H. 1263-1275)	2	26	9
Lucknow	1	41	7
SULTANE VON GAUNPUR			
Ibrahim Shah Schargi (H. 804-844)	1		86
Mahmud Shah (H. 844-862)	2		81
Mohamm. Shah (H. 861-863)			20
Husain Shah (H. 863-881)	1		100
BENARES	11		26
BENGALEN			
Mubarek Shah (H. 737-751)		33	
Hjas Shah (H. 740-758)		61	
Sikandar Shah (H. 75[illegible]-787)	2	126	
Azem Shah (H. 772-79[illegible])		75	
Fath Shah (H. 885-892)	1	3	
Husain Shah (H. 899-925)	1	11	
Nusrat Shah (H. 925-39)		11	
Mahmud Shah (H. 940-944)	1	4	
MURSCHIDABAD	17		28
CALCUTTA (Rupie)	2	18	63
Östal. Indien			
NEPAL (RADJAS V. NEPAL)			
Dschaya Prakasa Malla (1732)	5		30
Mahindra Singha Deva		3	
Dschkaja Ranadschit Malla		30	
Prithi Narajana	2		
Ragendra Lakschni Deva		3	
Ran Bahadur Saha Deva	1	40	
Girwāna Juddha Wikrama	7	16	
Ragendra Vikrama Sahadeva	7	10	
Surendra Vikrama Sahadeva (1904-1938)	4	8	
KUTSCH-BIHAR (RADJAS)			
Lakschmi Narajana (1649)			7
RANGPUR			
Raja Nari Singha			12

	AV	Æ	AR
ASSAM/KÖNIGE			
Suklenmung (1539-1552)			2
Supatpha Sinha (1681-1695)		16	
Rudra Sinha (1696-1714)	1	26	
Siva Sinha (1714-1744)		11	
Siva Sinha mit seiner Gemahlin	1	12	
Siva Sinha mit seiner Gemahlin Ambika Devi		7	
Siva Sinha mit seiner Gemahlin Sarveśvari	1	15	
Pramatta Sinha	1	16	
Radjeśvara Sinha (1751-1769)	9	49	
Lakśmi Sinha (1760-1780)	6	50	
Gaurinàtha Sinha (1780-1796)	11	100	
Bharatha Sinha (1791-1797)	2	12	
Sarvánanda Sinha (1794-1795)		9	
Bharajanátha Sinha (1818-1819)	4	12	
KACHAR		60	
RADJAS V. TIPERAH			
Krischna Manikja Deva		6	
Dhara Minikja Deva		3	
KÖNIGE VON ARRAKAN		16	

ca. 80 Indo-baktr. Munzen (noch ungeordnet) 2 Laden
Zahlreiche Indo-sass. Münzen, 4 Laden

A CONSOLIDATED LIST OF INDIAN COINS IN THE BIBLIOTHEQUE NATIONALE, PARIS[1]

JEAN BABELON

I.	Indo-Grecs	324
	Indo-Scythes	108
	Indo-Parthes	49
	Kushans	125
	Kushans postérieurs	20
	Kushano-Sassanides	27
	Ephtalites	19
II.	Monnaies primitives	44
	Kashmir	51
	Kabul	46
	Rathors de Canauj	4
	Chandella	34
	Andras	30
	Guptas	20
	Sultan Patan	29
	Grands Mongols (séries zodiacales)	187
	Pagodes	94
	Archipel Indien	72
	Total	1281

I. Les gros apports en ces séries proviennent
1. de la collection Armand Valton
2. de la vente Ready
3. du don Hackin 10 octobre 1926
4. Vente du Cal llotte de la Fuÿe 7 nov. 1923

II. Ces monnaies proviennent surtout :
1. d'un achat fait le 23 avril 1903 par le Cabinet des Médailles à MM. Rollin et Feuardent
2. due don A. Foucher, le 28 avril 1898

1. [This list is being printed in the form as submitted by M. Jean Babelon.—*Editor*]

A NOTE ON THE HISTORY OF INDIAN COIN-COLLECTION IN THE BRITISH MUSEUM

BRATINDRA NATH MUKHERJEE

The present article[1] does not pretend either to give a full account of the growth of the collection in question, or to furnish an exhaustive list of all Indian coins preserved in the museum concerned. It is confined only to tracing the landmarks in the development of this collection and to furnishing a list of names of the important series of Indian coins preserved in it.

This task is, however, beset with difficulties. The absence of any regular 'register of accession' for the Indian coins before A. D. 1869, and for any coin at all before A.D. 1837, debars us from having a correct idea about the provenances of all of the Indian coins added to the collection till the former year. Moreover, the descriptions of coins given in the registers are sometimes not adequate enough to help us in identifying them in the present collection. Again, with enhanced knowledge of early and medieval Indian coins, certain mistakes can now be detected in the arrangements of some sections of those species in this collection. And finally, some of the less well-known and little-studied series of Indian coins are here not properly arranged. However, we have tried to utilize[2] all the fourteen volumes of *Register for Oriental Series* and other relevant papers preserved in the *Department of Coins and Medals*, British Museum. We have also examined the arrangements of each series of the Indian coins preserved in the present collection. All relevant published books and articles, which are very few in number, have also been consulted. They are catalogued in the *bibliography* appended to the article. Here we can specially mention Dr. J. Walker's illuminating article on 'The Early History of the Department of Coins and Medals', published in the *British Museum Quarterly*, Volume XVIII, p. 76 ff. And inspite of studying

1. [We are grateful to Mr. Mukherjee for preparing this paper for us at a very short notice.— *Editor*]

2. It would have been impossible to collect the data for this note without the generous help from Dr. J. Walker, Mr. G.K. Jenkins, and Mrs. J.S. Martin of the British Museum and from Dr. A.D.H. Bivar of the School of Oriental and African Studies, London. We are grateful to all of them.

critically all these sources, published or unpublished, we can form only a rough idea about the early history of the collection in question.

II

The museum in question was opened to the public as the British Museum on January 15, 1759.[1] In the early years of its history, *National Collection of Coins and Medals* formed part of the *Department of Manuscripts*. In 1803, the *Collection* was transferred to the *Department of Antiquities*. It remained so until 1861, when a separate *Department of Coins and Medals* was created with W. S. W. Vaux as its first Keeper (1861-1870).[2]

The nucleus of the present collection of Indian coins was surely formed before the creation of this separate department. But we do not know when and how Indian coins began to be added for the first time to the *National Collection*. It seems, highly probable that the coins of the Mughal empire were among the first additions. For few such species were acquired from Miss Sarah Sophie Banks in 1818 and from R. Payne Knight in 1824.[3] A few of them were also included in the Museum cabinet as bequests from the collection of King George III.[4] There were probably, though not certainly, some Indian coins in the collection of oriental coins purchased for the Museum in 1825.[5] But the first important collection of Indian coins to be added to the Museum cabinet was that of William Marsden. His collection, presented to the nation in 1834 or thereabout,[6] included *inter alia* coins of the Sultans of Delhi, the Mughals and Assam. Henceforth Indian coins were continually added to the cabinet of the Museum. But the system of classified

1. *A Summary Guide to the British Museum*, p. 2.
2. *British Museum Quarterly*, Vol. XVIII, p. 79.
3. S. Lane-Poole, *The coins of the Moghul Emperors of Hindustan in the British Museum*, p. XLIV.
4. Ibid.
5. Information about this collection of Claudius Rich has been furnished to the author by Mrs. Martin.
6. The year of presentation is given as 1834 in *BMQ*, Vol. XVIII, p. 77. Mrs J.S. Martin, however, thinks, on the basis of the evidence of some old papers, that the year was 1836. For having an idea about the Indian coins in Marsden's collection, see *Numismata Orientalia Illustrata*, pt. I, 1823; pt. II, 1825.

arrangements for Indian coins began to be practised regularly probably only from the year 1869, when, shortly after the establishment of the *Department of Coins and Medals*, the rule for keeping yearly registers for accession of Oriental coins was enforced.

Several significant additions were made during the regime of R. S. Poole, the second Keeper of the department (1870-1893). In 1870, some Indo-Greek coins were acquired from A. Cunningham. In 1882, the Secretary of State for India decided to hand over the *India Office Collection* of coins of the Indo-Greeks, Indo-Parthians, the Indo-Scythians, the Kushāṇas, Kashmir and some other north Indian series to the British Museum.[1] This collection included many coins collected by J. Prinsep and probably also by C. Masson.[2] In 1885, a large collection was acquired from Alexander Grant. It included *inter alia* coins of the Indo-Greeks, Bhaṭṭāraka, the Sultans of Delhi, of Gujarat, the Mughals, Bengal and Kashmir.[3] The year 1886 witnessed the presentation to the Museum of W. Elliot's valuable collection of South Indian coins including *inter alia* the issues of the Sātavāhanas, the Chālukyas, the Cholas, the Kadambas, the Cheras, the Pāṇḍyas, and of the States of Mysore, Kochin and Travancore.[4] In 1888 and 1890, several coins of the Indo-Greeks, the Indo-Scythians, the Kushāṇas, the Bahamanis, the Sultans of Delhi, of Bengal, of Jaunpur and of Madura were acquired from Cunningham's collection.[5] In 1893, a great number of Local and Tribal coins of ancient India and several issues of medieval India were added to the cabinet as Cunningham's bequests.[6] About the same time, Bhagvanlal Indraji bequeathed to the Museum his fine collection of Kshatrapa and Sātavāhana coins.[7]

1. *BMQ*, Vol. XVIII, p. 77. Formal accession of this collection to the Museum cabinet probably took place later. See *Register for Oriental Series*, Vol. V, (1902).
2. There are reasons to believe that the coins, collected by Masson in India and Afghanistan, were sent to London. (See *Numismatic Chronicle*, 1943, pp. 96-97). A considerable number of Indian coins, now in the collection of the Commonwealth Relations Office (formerly India Office), originally formed a part of Marsden's cabinet. These coins are now under examination of the experts in the *Department of Coins and Medals*.
3. *ROS*, Vol. II & III.
4. Ibid., Vol. III In 1908 the Museum received 192 coins from Elliot's collection.
5. Ibid., Vol. III.
6. Ibid.; *BMQ*, XVIII, p. 77.
7. *BMQ*, XVIII, p. 77.

Additions of these and several other smaller collections to the Museum cabinet made the latter fairly well representative of different series of Indian coins. Necessities were now felt to publish *catalogues* of important series of Indian coins preserved in the Museum.[1] P. Gardner, S. Lane-Poole, E. J. Rapson etc. became actively associated with the task of cataloguing and evaluating different series of Indian coins.

Ceaseless flow of Indian coins into the Museum cabinet continued without any serious interruption during the Keepership of B. Head (1893-1906) and of that of J. Hill (1906-1931).[2] The Museum received, through the generosity of Henry Van den Vergh, a very fine set of Muhammadan, Sikh and Dogra coins belonging to G. B. Bleazby. This was presented in 1911 in commemoration of the Delhi Durbar.[3] In 1921, 1922 and 1923, a great part of R. B. Whitehead's collection, built up during the latter's stay in India, was acquired by the British Museum. The number of coins bought from Whitehead was nearly 5000. Among them were included the issues of the punch-marked series, the tribes and localities of ancient India, the Indo-Greeks, the Indo-Parthians, the Indo-Scythians, the Kushāṇas, the Kidarites, the Hūṇas, the Hindu Shāhīs, the Sultans of Delhi, the Mughals, Oudh etc.[4]

Dr. J. Allan was appointed as the Keeper of the department in 1931. He continued to be so till 1949, when Robinson succeeded him in that post. Among the important collections aquired by the Museum during these twenty years, mention should be made of the coin cabinets of H. Nelson Wright and that of Sir Richard Burn. In 1939, the Museum bought from the former more than 750 Mughal coins.[5] Burn's collection, purchased by the Museum in 1949, included *inter alia* coins of the punch-marked series, Taxila, the Kshatrapas, the Guptas, the Hūṇas, the Pallavas, the Cholas, the Mughals, and Tipperah.[6]

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1. See the *bibliography* for a list of such catalogues.
2. There were probably some interruptions during the years of World War I.
3. *BMQ*, Vol. IV, p. 36; XVIII, p 77. Formal accession probably took place in 1912 (see *ROC*, Vol. VI).
4. *ROS*, Vol. VIII, IX and X.
5. *ROS*, Vol. X. Coins from the same collection were also previously acquired in 1903 (*ROS* Vol. IV), 1904, 1905 (Vol. V), 1910 (Vol. VI) and 1924 (Vol. X).
6. *ROS*., Vol. XIII. The number of coins acquired was 641.

Dr. J. Walker, the present Keeper, assumed his charge in 1933. The most important collection added to the Museum cabinet since that year is that of W. R. Jacks. This collection included coins of the punch-marked series, the Pallavas, the Cheras, the Pāṇḍyas etc.[1] The latest among the important additions is the collection presented by F. H. Hardcastle in 1950. It includes the coins of the Hindu Shāhīs and the Sultans of Delhi.[2]

Several other collections, apart from these more important ones, have been added to the Museum coin-cabinet between 1869 and 1950. It is not possible to enumerate all of them in this note. We can only state the names of the donors or sellers (as the case may be) of the significant collections. Among the donors are included private individuals, Societies and governments, while among the sellers are individual coin-dealers and companies. There are also cases of individual collections either being sold or donated by other individuals or bodies. Following is the list of such persons and bodies together with the respective years of donations and sales indicated in brackets :[3]

Lincoln (1873); H. Rivett-Carnac (1881 and 1885); C. J. Rodgers (1882, 1883, 1887, 1893, 1895, 1901 and 1922); W. Theobold (1886 and 1887); G. G. Pearse (1886); J. Burgess (1888, 1889 and 1890); Indian Museum, Calcutta (1886, 1889 etc.); Asiatic Society, Calcutta (1890, 1905 etc,); Asiatic Society, Bombay (1890, 1893, 1895, 1897, 1899, 1909, 1914, 1924, 1939 etc.); Tufnell (1892); Government of U. P. and its predecessor governments (1900, 1915 etc.); R. W. Ellis (1901, 1902 and 1906); F. W. Lincoln & Sons (1901); Government of India (1908); Government of Bengal (1905 and some other years); C. J. Biddulph (1908 and 1922); Watson Museum, Rajkot (1902); Government Museum, Madras (1918); Spink & Sons (1910 and some other years); Government of C.P. (1909 and some other years); Government of Bombay (1907, 1918 etc.); D. W. Hoey (1920); W. H. Valentine (1922); H. E. Deane (1922); J. Allan (1929); H L. Haughton (1948); and Group Captain Carmichael (1959).

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1. *ROS.*, Vol. XIII. The total number of coins was 256.
2. *ROS.*, Vol. XIV, The total number of coins was 109.
3. For detailed information about these and most of the other collections added to the Museum cabinet since 1869, see *ROS* Vol. XIV. For H.L. Haughton's collections sold after his death see *A Catalogue of Valuable Collection...Formed by H. L. Haughton*, London, 1958.

As a result of all additions made during the last one and a half centuries, number of the Indian coins now preserved in the Museum has swelled to 40,000 or more. Of these species, about 694 belong to the punch-marked series, about 872 to the Indo-Greeks, about 855 to the Indo-Scythians, about 958 to the Indo-Parthians, about 894 to the Kushāṇas, more than 450 to the Sātavāhanas, about 819 to the Kshatrapas, about 725 to the Guptas, about 874 to the Kalachuris, about 2931 to the Sultans of Delhi and nearly 8950 to the Mughals.

As the collection of the Museum contains coins collected from different parts of the Indian sub-continent (i.e. India and Pakistan), its significance lies not only in volume, but also in variety. This will be apparent from a perusal of our list of names of different important series of the Indian coins preserved here. Within such a list, given below, have been included only those series about whose indentification we had no doubt. A few hundreds of unidentified or doubtfully identified coins had to be left out of consideration. We have retained, unless already proved inconvenient or wrong, the name given in the accession registers and in the cabinets to each series of coins. These series are called after either certain technical characteristics of the coins concerned, or the name of the people (or tribe or body) to which the issues belonged, or the name of the family of which kings concerned were members, or the title used by the rulers in question, or the nomenclature of the State or region in which the coins concerned were issued.[1]

We now furnish below the names of the important series of the coins of the Indian sub-continent preserved in the British Museum.[2]

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1. It has been done so for the convenience of scholars who may want to get from the Museum information about any series of the Indian coins preserved there.

2. This list does not include coins of Nepal and Ceylon or coins of any country other than India and Pakistan. We have also not considered the Achæmenian darics and coins of Alexander. They are not included in the Indian section of Museum collection. Though specimens of each of these two series has been found in the Indian subcontinent, it is doubtful whether they were ever in regular circulation in that country. (See B. N. Mukherjee's article in *Indian History Quarterly*, 1947).

   Our list does not include under separate headings the four series of coins called Larins, Huns, Pagodas and Fanams. For, though each of them is treated as a

No.	NAME	No.	NAME
1.	Punch-marked coins		Pañchālas
2.	Early cast coin (uninscribed)		Paratas[1]
			Parivrājakas
3.	Early single type coins		Rājanyas
4.	Local and tribal coins of Ancient India—		Sibis
			Taxila
	Achyuta		Trigarta
	Agācha janapada		Tripurī
	Almora		Uddehika
	Ārjunāyanas		Ujjayinī
	Audumbaras		Upagoḍa
	Ayodhyā		Upātikyā
	Erān		Vaṭāśvakas
	Kāḍa		Vṛishṇis
	Kanauj		Yaudheyas.
	Koṭa Kulas	5.	Coins of Sophytes[2]
	Maharāja janapada	6.	Indo-Greeks
	Mālavas	7.	Indo-Scythians
	Nāgas (of Narwar)	8.	Indo-Parthians

separate series in the Museum cabinet, they are actually issues of different authorities. Our list, however, includes the punch-marked series, Gadhiya paisa series etc., for it is often difficult to detect their issuing authorities. It may also be noted here that diacritical marks have been used generally in cases of writing the names connected with ancient Indian coins. But sometimes well known place names connected with the latter series have been written without diacritical marks and even in their modern forms. On the other hand, diacritical marks have been used for certain names connected with the medieval Indian coins.

1. This name should now be added to our known list of tribal coins of ancient India. We have examined their coins as well as the references to them in the *Geography* of Ptolemy, the *Mahābhārata*, the *Manusaṁhitā*, the *Mahāmāyūrī* and other sources, and to their country in the Naqsh-i Rustam inscription of Shāpūr I. We propose to suggest elsewhere that this tribe came to India, probably in the wake of the Kashāṇa invasions and ultimately settled in Baluchistan. They had commercial activities. Their country was ultimately conquered by the Sassanids.

2. R. B. Whitehead thinks that coins of this series were never in circulation in India. (See R. B. Whitehead's article in the *Numismatic Chronicle*, 1943).

No.	NAME	No.	NAME
9.	Yüeh-chis[1]	16.	Mohāraṭhis (Chitaldrug)[3]
10.	Kushāṇas	17.	Ānandas (Karwar)[4]
11.	Imitations of the Kushāṇa coins (including the so-called Purī-Kushāṇa series)	18.	Kshatrapas of Mathurā
		19.	Kshaharātas of W. India
12.	Kushāṇo-Sassanian series	20.	Kshatrapas of W. India
		21.	Coins of Sarva Bhaṭṭāraka[5]
13.	Kidārites	22.	Roman coins found in India[6]
14.	Sātavāhanas		
15.	Kuras (Kolhapur)[2]		

1. Some coins now in the British Museum have been found in certain parts of Afghanistan and can be ascribed to the period when these regions were under the Yueh-chis. Hence, they are conjecturally ascribed to this people. We have made a critical study of these coins, and intend to publish an article on them.
   Ascription of this series to the Yüeh-chis is due to a brilliant hypothesis offered by Dr. D. W. McDowall. This series does not strictly belong to the field of the Indian numismatics. It is, however, included in the Indian section of the Museum cabinet. We also mention it because the students of the Indian numismatics may be interested in it.
2. In the Museum cabinet the coins of the Kuras are connected wrongly with those of the Sātavāhanas. Testimonies of these coins and a comparison between the stratigraphic evidence of the coins of the Kuras and that of the species of the Sātavāhanas, found during excavations at Kolhapur, should convince one that the Kuras issued coins as independent rulers. They may have been feudatories in earlier period. But they had become independent when they issued coins. Later, probably Gautamīputra Sātakarṇi conquered their territory.
3-4. Coins of these series are arranged in the cabinet issues of the feudatories of the Sātavāhanas. There is, however, no ground to suggest that the Ānandas were ever feudatories of the Sātavāhanas. Mahārathi is surely a subordinate title. But again a comparison between the stratigraphic evidence of their coins and that of the issues of the Sātavāhanas, found in the excavations at Chitaldrug, shows that the Maharaṭhis issued coins as independent rulers. Probably they retained their administrative title. We are publishing elswhere a discussion on this topic.
5. In the Museum cabinet coins of this series are wrongly designated as issues of Valabhi (= Maitrakas of Valabhi).
6. In the British Museum there is a considerable number of Roman coins of Indian provenances. They are, however, not included in the Indian section. We have here included the

No.	NAME
23.	Bodhis
24.	Imperial Guptas
25.	Imitations of the Gupta coins
26.	Traikūṭakas
27.	Coins of Śaśāṅka, the king of Gauḍa
28.	Coins of Kṛishṇarāja, the Kalachuri king[1]
29.	Hūṇas
30.	Maukharis of W. Magadha and U.P.
31.	Coins of Harsha, the king of Thaneswar and Kanauj
32.	Pallavas
33.	Eastern Chālukyas
34.	Western Chālukyas
35.	Arabs of Sind
36.	Gadhiyā Paisā
37.	Imperial Pratihāras
38.	Coins of the dynasties of early medieval Kashmir
39.	Hindu Shāhīs of Kabul and Ohind
40.	Tomara dynasty
41.	Gāhaḍavāla dynasty[2]
42.	Kalachuris of Ḍāhala
43.	Kalachuris of Mahākosala
44.	Chandellas
45.	Chauhāns of Delhi and Ajmer
46.	Cheras (Kongudeśa)
47.	Cheras (Kerala)
48.	Cholas
49.	Pāṇḍyas
50.	Kadambas
51.	Kākatīyas of Warangal
52.	Yādavas of Devagiri
53.	Vijayanagara dynasty
54.	Sultans of Delhi (including the Turks, the Khaljis, the Tughluqs, the Sayyids and the Suris)
55.	Sultans of Bengal
56.	Sultans of Kashmira
57.	Sultans of Jaunpur
58.	Sultans of Madura
59.	Bahamani dynasty
60.	Qutab Shāhīs of Golconda
61.	Ādil Shāhīs of Bijapur
62.	Barīd Shāhīs of Bidar
63.	Nizām Shāhīs of Ahmadnagar
64.	Mughal dynasty
65.	Rajputs of Mewar
66.	Rajputs of Marwar
67.	Āhoms
68.	Cooch Behar
69.	Tripurā
70.	Jayantīpura
71.	Nayakas of Madura
72.	Satara (including the coins bearing the name of Śivājī)
73.	Cuttack (Orissa)
74.	Maldivi
75.	Kangra
76.	Oudh
77.	Mysore (Hindu)
78.	Mysore (Moslem)
79	Nawabs of Arcot
80.	Sikh kingdom of the Panjab
81.	Dogras of Jammu and Kashmir

name of this series, because Roman coins are known to have been in circulation in India.

1. In the cabinet Krishnarāja is wrongly designated as a Rāshṭrakūṭa king.

2. In the cabinet this dynasty has been called 'Rāthoḍ' family.

No.	NAME
82.	Issues of the East India Company
83.	Coins issued by different States in India during the age of the British Dominance[1]—
	Ajmer
	Alwar
	Bajranggarh
	Balwantnagar
	Balapur
	Banswara
	Baroda
	Bastiram
	Bhawalpur
	Bhopal
	Bikaner
	Bundi
	Cochin
	Cutch
	Datia
	Dewas
	Dhar
	Dholpur
	Garhwal
	Gwalior
	Hyderabad
	Indore
	Isagarh
	Jabalpur
	Jaipur
	Jalaun
	Jaisalmer
	Jhansi
	Jhalawar
	Jhind
	Jodhpur
	Junagarh
	Kaithal
	Kalat
	Karauli
	Kishangarh
	Kotah
	Kotla
	Kuchawan
	Las Bela
	Mewar
	Mysore
	Nagod
	Nagpur
	Narwar
	Navanagar
	Nazibabad
	Orchha
	Patiala
	Poona
	Pratapgarh
	Pudukottai
	Radhanpur
	Ratlam
	Rewa
	Sailana
	Saugar
	Shahpur
	Sheopur
	Shikarpur
	Sirmur
	Tonk
	Ujjain
	Udaipur (Chhota)
	Udaipur
84.	Coins of the Government of British India (in the British and Colonial Series)

III

It is not possible to give here detailed description of any of the series mentioned above. For information about

1. Most of these States were in existence before the supremacy of the British power began to be seriously felt in India. But as they are all ascribed in the cabinet to one class or group, we have chosen this name to denote the whole group.

some of them, the reader may be referred to the published catalogues, a list of which is given in the *bibliography*. The information, however, will necessarily be incomplete for these catalogues are now out-of-date and do not include many relevant coins now preserved in the Museum. We now badly need revised editions of these catalogues. So also we like to have printed catalogues of the important unpublished series preserved in the collection of the Museum. For example, at present we are engaged in examining the Hūṇa coins of this collection, and are convinced that the publication of a critical dissertation on these species will render a great help in solving the problems connected with one of the most enigmatic series of coinages of ancient world.[1]

Bibliography

1. J. Allan, *Catalogue of the Coins of the Gupta Dynasties and of Śaśāṅka, the king of Gauḍa*, London, 1914.

2. J. Allan, *Catalogue of Coins of Ancient India*, London, 1936.

3. P. Gardner, *The Coins of Greek and Scythic Kings of Bactria and India in the British Museum*, London, 1886.

4. S. Lane-Poole, *The Coins of the Muhammadan States of India in the British Museum*, London, 1885.

5. S. Lane-Poole, *The Coins of the Sultans of Delhi*, London, 1884.

6. S. Lane-Poole, *The Coins of the Mughal Emperors of Hindustan in the British Museum*, London, 1892.

7. E. J. Rapson, *Catalogue of the Coins of the Andhra Dynasty, the Western Kshatrapas, the Traikūṭaka Dynasty and the "Bodhi" Dynasty*, London, 1908.

8. *Register of Accession for Oriental Coins in the British Museum*, Vol. I–XIV. (Unpublished).

9. J. Walker, 'The Early History of the Department of Coins and Medals', *BMQ*, Vol. XVIII, pp. 76 ff.

1. Some of these coins have been published. But the whole series of Hūṇa coins of this collection has nowhere been treated critically.

A SHORT NOTE ON THE COIN-COLLECTION OF THE CHANDRADHARI SINGH STATE MUSEUM

K. K. MISRA

This State Museum has been founded with the varied collections of Shri Chandradhari Singh of Chandranagar Deorhi, P. S. Madhubani, Dist. Darbhanga and his two sons, as nucleus. The coin-collection of this Museum also forms a part of the munificent donation by the above gentlemen. It consisted of 1837 coins which was augmented later on by the Government, through acquisition, gift or purchase, by 79 coins. The coins mainly belong to Indo-Greek, Muslim and Hindu periods. A number of cast coins and mould coins are also available. However, proper classification is still incomplete and it will take some time to decipher and arrange the collections in order to have a glimpse of the coin history of India. Prior to this, chemical treatment of each coin is necessary. One of the rare coins available in this Museum is that of king Menander. The other rare gold coins belong to Gupta period. Mention may be made of the gold coins of Narsimhagupta in this connection. There are several punch-marked coins too as well as two terracotta seals from Sankissa and Mathura. An approximate idea of the collection can be had from the following figures :

Gold coins	—	10
Silver coins	—	460
Copper coins	—	1444
Miscellaneous	—	2

Efforts are being made to enrich the collection by the coins available in the locality, belonging to Pāla-Sena and other periods under the Treasure Trove Act and even otherwise.

THE COIN-COLLECTION OF THE JAIPUR MUSEUM

SATYA PRAKASH

The earliest coins comprising the Jaipur Museum collection are the silver punch-marked coins, of which only four specimens are represented. The Archaeological Department of Rajasthan, however, possesses about 3,000 coins. Most of the latter come from Rairh which has yielded the largest number yet found from any single State in India. The Jaipur Treasury has also got some of these coins in the miscellaneous accumulation of old uncurrent pieces. All these put together and examined may reveal important groups and classes. Of the four coins in the Museum, one is round, two square with clipped corners, and one oblong. On the obverse, all the four have got Sun symbol in common. Other symbols are bull, rabbit, tree, chaitya, caduceus, and a few indistinct and incomplete devices. The reverse is obliterated and shows bare traces of one or two punches.

Jaipur Musenm has got a couple of copper coins of the Kushāṇa king Vima Kadphises of ordinary type showing king on one side and Śiva with bull on the other. There is also a single copper coin of Kanishka which contains his effigy with the Greek legend 'the Great king of kings' on the obverse, and the figure of the Sun god with his name on the reverse. Huvishka is represented by two gold and two copper coins. The gold coins bear half-length portrait of Huvishka on the obverse, and the deities Ardochsho and Mao on the reverse. The copper coins illustrate two varieties; on the obverse, the first shows king reclining on couch while the second represents him in a seated position; on the reverse, there is a deity on both the coins.

Our collection of Gupta coins consists of the following types: the Standard type of Samudragupta, and the Archer and Lion-slayer types of Chandragupta II. The Jaipur State Treasury is in possession of one specimen each of the Chandragupta-Kumāradevī type and Lyrist type of coins of Samudragupta. A tiny silver piece of king Śīlāditya in our collection also deserves mention. It was received from the Lucknow State Museum.

Then we have four electron coins of barbarous appearance, derived from the Standard types of the later Kushāṇa rulers. They are the issues of Lalitāditya Muktāpiḍa of Kashmir

and contain the legend *Śrī Pratāp* standing for Pratāpāditya. On the reverse, the legend is *Kida*, an abbreviation of Kidara, the name of the original leader of the tribe who conquered Kashmir about 475 A. D. These specimens belong to the hoard of 16,443 coins which was discovered in the fortress of Aunjhar in Banda District of U.P. Chemical analysis shows that they contain 10 per cent gold, 13 per cent silver, 75 per cent copper, and the rest alloy. One of these specimens contains the letter *ja* in between *Śrī* and *Pratāp*, denoting that it was probably issued by Jajja—an usurper.

The Museum has one specimen of *ādivarāha dramma* of the Gurjara Pratihāra king Bhojadeva I of Kannauj. There is also a gold coin of Gangeyadeva, the Kalachuri king, bearing on the obverse the king's name in Devanāgarī script and Lakshmi seated with four hands spread at her sides on the reverse. The Gāhaḍavāla kings imitated this design, as is clear from a gold coin of Govindachandradeva preserved in the Museum.

Rajputana currency is represented here by the thin flat pieces on which the Sassanian influence is clear; they bear the bust of the king on obverse and a Sassanian fire altar with attendents on reverse. Later on, these coins were styled as *gadhaiya paisas*.

We have 180 copper coins attributable to the Brāhmaṇa kings of Ohind, from a single find, which show a slight tinge of bronze.

The South Indian coins in our Museum are represented by 23 fanams described as Rāmarāya, Vīrarāya and Pudiya by the Madras Government Museum from which most of these have come as gifts to this institution, and 26 gold coins comprising the issues of Pallavas, Cholas, Rāshtrakūṭas, Chālukyas and the kings of Vijayanagar etc. Attention is invited to *padmatańkas*, *gajapati pagoda*, *star pagodas* and 3 *swami pagodas*. We also have one specimen of the curious fish-hook money (larin) issued by Ali II of Adilshahi dynasty of Bijapur.

Muhammad bin Sam is represented by a solitary billon specimen. The Museum has coins also of Iltutmish, Ghiyasuddin Balban, Jalaluddin Firoz II, Allauddin Muhammad Shah, Mubarak Shah I, Ghiyasuddin Tughluq I, Muhammad (III) bin Tughluq, and Firoz Shah Tughluq. The Lodis are represented by some coins of billon and copper.

Issues of Shera Shah and Islam Shah are represented by a few copper pieces only.

The Museum has also a few copper coins of the Bahamani kings Ahmad Shah I, Humayun Shah, Muhammad bin Humayun and Kalimullah Shah. Among the kings of Jaunpur, Ibrahim Shah, together with Mahmud Shah and Hussain Shah are represented in our cabinet. Coins of Hussain Shah predominate in number and form the bulk of the collection. Our Museum collection of the coinage of Gujarat kings starts with Mahmud I. Issues of Muzaffar Shah II, Bahadur Shah and Mahmud Shah III furnish examples of the so-called pedigree coins.

The collection of the coinage of the Mohammadan kings of Malava consists of the coins of Alp Khan, Mahmud Shah Khilji and Ghiyas Shah.

Among the coins of Mughal emperors, the Museum has coins of Humayun, Akbar, Jahangir, Aurangzeb and Farrukh-siyar. The noteworthy Mughal pieces are a five-muhar piece of Akbar, a fine set of portrait coins of Jahangir and his copper coins known as *Rawanis* and *Falus*.

Refiu-d-darjat who ruled for a year only (1719 A. D.) is happily represented in our cabinet by a silver rupee, which bears the legend 'struck in India with thousands of blessings, king of kings on sea and land, Refiu-d-darjat.'

Coins of Muhammad Shah who called himself a 'Second Lord of the fortunate conjunctions' on his coins are represented in our cabinet and they have a special importance for our collection. It was in his time that the mint 'Savai Jaipur' was instituted and coins were struck by the Jaipur ruler in the name of the Mughal emperor from 1153 H. Coins of the first four regnal years of Ahmad Shah Bahadur from Savai Jaipur mint exist in the cabinet.

The Jaipur Museum coin cabinet has also got stray specimens of the coinage of some 25 Indian States.

THE COIN-COLLECTION IN THE KERALA MUSEUMS

N. G. UNNITHAN

Kottayam Hoard—Punch-marked Coins

In the year 1946 A. D., a hoard of 184 punch-marked coins was discovered in Elikulamkara, Akalakunnam Pakuti, Kottayam District, erstwhile Travancore State. The coins now form part of the collections of the Padmanabhapuram Archaeology Museum, Jointly controlled by the Governments of Madras and Kerala.

It is unfortunate that the coins have not been properly grouped, classified or studied. The one symbol that is seen in almost all the coins is the *Parama Bija Mudra*, or the Sun symbol according to present day scholars, sometimes in association with a chakra of 6 points. The symbol appears to be geometrically better executed and it may be presumed that the coins belong to the middle or later period. A five group system appears to be followed in the majority of the coins. The coins are worthy of study and it is proposed to publish a note on their class and groups of symbols.

Eyyal Hoard—Punch-marked and Roman Coins

It is a singular coincidence that in the same year a hoard containing 33 silver punch-marked coins and 12 gold and 71 silver Roman coins, was discovered from Eyyal, Trichur District, erstwhile Cochin State. The 71 silver coins have been identified to belong to Mark Antony, Claudius, Caesar Augustus, Nero, Tiberius, Young Nero and others and the 12 gold coins to Tiberius, Claudius, Nero and Trajan. The punch-marked coins have not been properly classified and grouped. In some of them it is difficult to identify clearly even a single symbol while some others have groups of 5 symbols with the *Parama Bija Madra* or Sun symbol very prominent. It is impossible to assign a definite period for the coins before a scientific classification and arrangement on a group basis is attempted, though at present they may roughly be assigned to either the middle or later period. The groups of symbols in the punch-marked coins discovered in Kerala have not so far been studied ; it is likely that they may throw new information on the grouping of symbols on the punch-marked coins.

Kerala Coins

The coins of Kerala even today require a satisfactory solution. Many of the symbols and the origin of the coins remain a mystery. One perplexing feature about them is that most of the early coins do not have any script on them.

CHARACTER

Kerala, it appears, has a special attraction to coins of small denominations. Their weights range between 2 and 6 grains. Rasi Panam, Anantha Raman Panam, Chinna Panam, Kali Panam, Velli Panam and Vira-Raya Panam are some of her old coins, whose symbols defy proper and correct identification. Simple dots, curved and straight lines form the main features of the symbols and the social conditions and religious beliefs of the people and the sovereigns have to be probed before a satisfactory solution is suggested.

The case, however, is different with the later coins. They carry emblems, figures and scripts which make identification easy. The Lakshmivarahan, Parvathivarahan, the Travancore Varahan, Double chuckram and Chinna chuckram, are some of the later types of coins.

KINDS

Unfortunately a representative collection of all these types of coins is not available in Kerala museums. Kali Panam, Vira Raya Panam (both old and new), Vira Kerala, Double and single puthens, Varahans, and Parvati rupees form important items in the collections of the museum. It is interesting to note that these coins of small denominations have been given different names on the basis of slight changes in curves and dots on them. The Kali Panam and Velli Panam are almost similar except for a floral wreath round the edge on the obverse and a double branch on the reverse of the latter. Anantharaman, Chinna and Kali Panam resemble very much as they have all degraded form of conch on the obverse and indefinite dots and lines on the reverse. Department of Archæology is making attempt to incorporate the entire coinage of the State and publish them shortly in a Bulletin of Kerala coins.

South Indian Coins

The Museum contains a representative collection of the coins of South Indian dynasties. Andhras, E. Chalukyas, Hoysalas, Cheras, Cholas, Vijayanagar, Pāndyas, Nāyakas are some of the dynasties represented. The most important

of these are the Lion, Bow & Arrow and Chaitya type of the Andhras, Bull and Lion open mouth type of the Chalukyas, Elephant to right and Śrī above of the Hoysalas, Virabhupatiraya, Pratapa Harihara Venkatapathiraya of Vijayanagar, Bow, seated tiger and 2 fishes type and Ceylon figure series of the Cholas, Swastika and fishes type of the early Pandyas, and Venkatappa Nayak and crude figure standing or holding club of the Nayakas.

Miscellaneous Coins

In addition to the above, miscellaneous coins of the French, English, Dutch, Hyder Ali, Tipu Sultan form other items in the collections of the Museum. Those of French are the Indo French Arcot issues, of the English Indo-British three swami Pagoda and old star pagoda, and of Hyder ali and Tipu Tultan, the Fanams and the paisas. No scientific catalogue of these coins exists at present, but it is propsed to bring out a catalogue of coins in the Kerala museums in the near future.

THE COIN-COLLECTION IN THE GOVERNMENT MUSEUM, MADRAS

R. VANAJA

The Government Museum, Madras is the oldest State Museum of India. Although Dr. Balfour was the first officer in charge of the Museum, when it was started in 1851, it was during the time of his successor Captain Mitchell that the nucleus of a coin-collection was made and this collection steadily increased during the tenure of office of his successors, Dr. Bidie, Edgar Thurston and Dr. Henderson. It was also largely due to the efforts of Bidie that the coin-collection increased from a few hundreds to more than seven thousand gold, silver and copper coins.

Dr. Bidie made a thorough study of the gold coins in the collection, rich in the South Indian series, and brought out two pubications, one on the gold coins of the Museum and another on the Pagoda or Varaha coins of South India. The latter was published in the *Journal of the Asiatic Society of Bengal*, Vol. LI.

During the years 1885-1908, the Madras Museum became a great centre for the study of Anthropology. A pioneer investigator in human biology in South India, Dr. Edgar Thurston, the Superintendent of the Museum, at this time, was keenly interested in Numismatics as well. Unlike his predecessors who concentrated more on the South Indian series, Dr. Thurston was interested also in the other series. The North Indian coin-collection was augmented with the donations received from the Royal Asiatic Society of Bengal and its Bombay Branch. Dr. Thurston enriched the collection by the addition of gold coins of South Indian dynasties, Pathan and Mughal coins presented by C. J. Rodgers, and other series of Indian coins which he came across, of which mention may be made of Roman aurei, and Roman denarii from Vellalure, Coimbatore. During his time, in the year 1892, the Museum received the collection of South Indian coins belonging to T. M. Scott of Madura. Dr. Hultzsch recommended the acquisition of 508 coins—gold panams, punch-marked silver, Ceylon, Chola, Pāṇḍya, Vijayanagar and Sethupathi coins—out of a collection of twelve thousand coins. It was also at about the same time the Museum collection of East India Company coins was enriched by the purchase of a small collection which included lead double pice, Bombay,

George I panams etc. By 1908 more than a ten thousand coins were already in the Museum.

Dr. Henderson, Superintendent of the Museum during the years 1908-19 got the collections catalogued and labelled. He collected for the Museum, Indo-Danish coins and South Indian coins during his time and published a comprehensive catalogue of the coins of Hyder Ali and Tipu Sultan.

By 1941, whole Indian series of coins was well represented in a collection containing twenty-six thousand. To the foreign coin-collection, which was hitherto unattended, specimens of primitive money, Chinese spade, knife money etc. and Swedish plate money were added during the last few years.

The Curator in-charge of the Numismatics section attends to the work of cataloguing and registering the coins acquired for the coin cabinet. At present the collection contains more than twenty-six thousand coins.

Out of the entire collection, nearly one half represents the coinage of Northern India from the earliest times to the present day.

The *Purāṇas* or punch-marked coins, the earliest Indian coins in the collection, are more than three thousand in number. This collection has been built up mainly through treasure trove hoards of coins received from time to time from various parts of what was Madras Presidency and the present Madras State. Treasure trove hoards of these silver punch-marked coins came from all parts of South India, especially from the districts of Vizagapatam, South Arcot and Tinnevelly. Notice of discovery of punch-marked coins in the South dates back to 1803. It was however only in the year 1894 that the Madras Museum received its first hoard of punch-marked coins from Bhimlipatam in Vizagapatam. There are 74 coins of this hoard at present. The collection was augmented with the addition of one hundred and sixty-six coins from Vembarur, Tiruchi district, found probably in the year 1908 and fourteen coins from Kannian-kuttai village in Salem district. In 1924, some more coins were received from Gudivada in Kistna district followed by 770 silver punch-marked coins from Mamblam, Madras. This hoard with a single gold aureus of Augustus came into the Museum in 1929. It was not until years later, in 1937, that the Museum received seventy-one unique coins from Singavaram, in the Nandigama taluk of the Kistna district. The coins of this hoard were believed to have been

discovered even earlier as early as 1934 but the fact came to the knowledge of the authorities only in 1937. By that time only seventy-one coins could be procured for the Museum coin cabinet. The most interesting find however was unearthed sometime in 1941. This hoard containing 1138 silver coins was found in Bodinaikkanur, Periyakulam taluk, Madura district. Following this hoard, the Museum received eight coins from Rothulapalem, Bunilipatam Taluk, Vizag district in 1941, 63 from Alampalayam, Dharapuram, Coimbatore district in 1948 and 287 coins found in Veerasigamani village, Sankarankoil taluk, Tinnevelly district, 49 coins from Mathur village and 83 from Periamambattu village in South Arcot during the years 1956-57. In addition to these treasure trove hoards, the collection also contains 2 silver coins of the hoard found in Mangrovl in Wardha, presented by the Director of Industries C.P. in 1924, two coins from Jelif in Durbhanga district presented by the Bihar and Orissa Coin Committee in 1931-32. The Bihar and Orissa Coin Committee presented in 1933 nine coins out of the famous Purnea hoard. Of the hoards of coins mentioned above, treasure trove hoards and other coins, more than half of them are of the ordinary variety of *Purāṇas* of the five symbol variety. These coins have been classified on the basis of their symbols as Pre-Mauryan, Maurya and Post-Mauryan. The Singavaram hoard of 71 coins mentioned above constitutes a new type of *Purāṇas*, characterised by features to which parallels are hard to find. There is much similarity between the coins of this hoard and those of the Sonepur hoard discovered in Orissa, in the absence of the usual sun and six-armed symbols and other common characteristics associated with punch-marked coins. The other hoard, the Bodinaikkanur hoard of punch-marked coins "a random sample from the currency of a bygone age" with a symbol grouping of either four or five obverse symbols and a single reverse symbol identified as a fish, is a typical South Indian type of punch-marked coin—"a Pandyan issue of punch-marked coins. Copper punch-marked coins in the collection are very few of which the two coins from Besnagar presented by the Resident of Gwalior State in 1936 are interesting.

The Indo-Bactrian Greek coin series in our collection amount to a hundred in number. A major portion of this series in our collection were those found in excavations at Taxila and presented to us along with local ancient and Kushāṇa coins by the Director General of Archaeology from the Taxila Museum in 1940. A few copper coins were presented in 1934 by the Superintendent, Arch. Survey Western circle for North Western Frontier

Provinces as part of the treasure trove hoard in Bhutri village, Hazara, N. W F. Provinces. We have in our collection coins of Euthydemus I, Demetrius, Eukratides, Heliokles, Antialcidas Lycias, Apollodotus I and Apollodotus II, Strato, Menander, etc.

The Kushāṇa coins in the collection number about seventy. The collection has a few gold dinars of Vasudeva and copper coins of Kadphises I, Kanishka and Huvishka. Of special interest however are the coins of Kanishka. The rare Buddha coins of Kanishka—we have two copper coins of Kanishka—and his other coins in the collection are noteworthy for the evidence they afford on his religious outlook, especially those bearing a strange medley of gods—Greek, Persian and Indian ; while the gold coins of Vasudeva with the figure of Śiva with bull and trident and other insignia of Hindu iconography testify to the rapidity with which these foreigners succumbed to the influence of their Indian environment. The Kushāṇa copper coin collection of our cabinet was built up mainly through coins received from the Government of U. P Part of a treasure trove hoard from Bhanjakia, Mayurbhanj, were presented by the Maharaja of Mayurbhanj. Nineteen copper coins from Semaraua, P. S. Deoria Gorakhpur district, were presented by the U. P. Goverment in 1923, and 11 copper coins from Orai village, Basti district. From the Patna Coin Committee were received 25 copper coins which were found in Arwi village, Barabanki district. A few copper Kushāṇa coins found in Taxila were also received from the Director General of Archæology in India.

The Gupta coins in our collection are only twelve in number ; three of Samudragupta, six coins of Chandragupta I and Chandragupta II and the rest of later Gupta rulers like Kumaragupta II. The types represented are the famous Chandragupta I–Kumaradevi type, Standard type of Samudragupta, and Bow and arrow type of Chandragupta II. The collection is very small and poor, and has much scope for improvement. There are no silver and copper coins of the Guptas in the collection.

Of the crude inartistic and limited coinage issued by the numerous Rajput dynasties who flourished and declined between the 8th and 12th centuries A. D., there are about fifty coins in all. The coinages of only the Rathors of Kanauj, Chauhans of Ajmer and those of Narwar are represented in it. A majority of these were presented by the Superintendent of Archæological Survey of India for the Punjab

Government in 1934. These were found in Ghamrauj village in Gurgaon and are mostly of the Bull and Horseman type.

The collection has over 1000 coins of the Khiljis, the Tughluqs, the Sayyids and Lodis and the Surs representing the coinage of the period from 12th to the 16th century A. D. Later Sultanate coins are comparatively plentiful in our coin cabinet than the earlier Bull and Horseman issues. The Delhi Sultan series of coins in our collection were built up through treasure trove hoards, donations received from North Indian museums and the Governments of U. P., Punjab etc., and a major portion of Mr. Rodger's collection. Gold coins of Ghiyasuddin Tughluq and Alauddin Mohammed Shah were found from treasure trove hoards in the years 1921 and 1931, from Karanai-puducheri, Chingleput district, Ramadurgam, Bellary district, and those of Qutbuddin Mubarak Shah I, Mohammad III bin Tughluq from Nuzvid in Kistna district in 1931. In 1957 two gold coins of Mohammad III bin Tughluq found in Pipargaon, Farrukhabad district, were presented to us by the U. P. Coin Committee. Silver and copper Delhi Sultanate coins were collected from gifts from the Governments of Uttar Pradesh, Superintendent, Archaeological Survey, Northern Circle and the Punjab Government. In 1928 we received five silver coins of Sher Shah and Islam Shah, part of treasure trove from Bhilwal, Haidargarh, Barabanki district through the Government of U. P. and 97 copper coins of the Sur monarchs Islam Shah, Ibrahim Shah, Mohammad Sha Adil, part of treasure trove find from Nandialawaraich, Gijranwalla district through the Government of Punjab and another eight coins of Shar Shah, Islam Shah and Mohammad Adil part of find from Sandaha village, U.P. in 1934 through the U P. Government. The collection also contains twenty copper coins of Balban, Kaiqubad, Firoz II, Alauddin Mohammad Shah, Mubarak Shah I, Tughluq I and Mohammad III bin Tughluq from Abdulapur Saraon, Allahabad, presented by U.P. Government in 1935; three gold, silver, and 1 copper of Husainpur, Nakpur, Sahranpur district find presented by the U. P. Government in 1936 and six Lodi coins from Ranikhet, Almora Dist., twenty-seven silver, billon and copper coins of Kutbuddin, Mu Bahram Jalaluddin Firoz etc. presented by the Superintendent of Archaeological Survey of Northern Circle, Agra, Delhi in 1939. The collections were built up mainly on the donations received from the institutions mentioned above. The only hoard of Delhi Sultanate silver coins worth mention for the South was a hoard of fifty billon coins found in 1942 from Rajapudi village, Peddapuram, East Godavari district. This hoard contained coins of Alauddin Mohammed Shah Tughluq I, etc.

The Bengal Sultanate coin-collection amounts to more than hundred silver coins in number.

The Mughal coins in our cabinet are the best in the whole series of medieval North Indian coins. The three thousand Mughal coins in the Museum, represent the coins issued by almost all the Mughal rulers from Humayun to Shah Alam II. Coins of Pretenders have found their place in the cabinet helping to fill many gaps in the history and chronology of these Great Mughals. The coins of the Mughal emperor Aurangazeb amount to one third of the entire Mughal coin collection, containing 875 coins in gold, silver and copper, and the rest 650 coin of Shah alam II, 525 of Mohammad Shah and 400 of Akbar etc. The Mughal coin collection, especially of the silver coins, was received from various institutions in the North on distribution gratis basis. In 1925 the Museum received twenty-nine silver coins of Jahandar Shah, Farrukhsiyar, Rafiuddarjat, Shahjehan II, Mohammad Shah, Ahmad Shah, Shahjehan III etc. from the Director General of Archaeology in India who had purchased them from the Nelson Wright's collection. Similarly in 1926 we received another set of twenty silver coins as permanent loan collection from the Director General of Archaeology purchased out of the Nelson Wright's collection of Mughal coins. In 1925 nine silver coins of Aurangazeb, part of find from Dengaria village, Hoshangabad district, were presented by the Director of Industries, C. P., Nagpur. In the same year 20 silver coins of Mohammed Shah and Shah Alam II were found in Malkangiri village, Vizagapatam district and acquired for the Museum. Six silver coins of Aurangazeb from Kothari village, Mangrul, Akola district, were received in 1925 from Central Provinces and fourteen silver in 1928 from the Punjab Government, part of find Nagkhura village, Amritsar. 51 copper falus of Akbar from Firozpur district, Mukh tsar tehsil, Theri village, were presented by Punjab Government in 1928. Nineteen rupees of Shah Alam II were presented to this Museum by the Government of U. P. in 1928. In 1928 were found thirty-four silver coins of Akbar, Shahjehan, Aurangazeb, Mohammad Shah, Farrukhsiyar and Shah Alam II in Sullabadi village, Rayaghad agency, Vizag district. In 1929, 40 silver coins of Shah Alam I, Azam Shah, Jahandar and Farrukhsiyar were presented by the Director of Industries C. P. Fifty-four silver coins were found in 1929 at Tumopāra, Koraput agency, Vizagapatam district containing coins of Akbar, Shahjahan, Aurangazeb, Shah Alam I, Jahandar Shah and Farukhsiyar and acquired for the Museum in 1930. Twelve gold mohars of Akbar, Shahjehan and Mohammad Shah were purchased from a

private coin-collection and added in 1930. One distinguishing feature of our Mughal coin-collection is that it includes not only the Mughal rupees and mohar but also the pagodas and panams issued in the name of the some later Mughal emperors, Ahmad Shah, Mohammad Shah, Alamgir II and Shah Alam II from South Indian mints. These pagodas and panams are found mostly in the Cudappah district. 43 panams of Ahmad Shah and Alamghir II were found in 1941 at Bandlapalle, Rayachoti taluq, Cuddapah district; 34 gold coins mainly panams found in 1944 at Sidhout Cuddapah, Similar coins have been found in other places at Cuddapah. Of particular interest are the Din-i-Ilahi mohars of Akbar—those which he issued to propagate his "divine faith". Of the famous zodiacal mohars issued by Jehangir, we have only two of dates 1031 minted at Agra with taurus and leo signs. The Museum coin cabinet has a good collection of the rupees of the later Mughal emperors.

Coins issued by the Indian States for a period of hundred years or more after the decline of the Great Mughals are also in the collection.

One might expect the South Indian series in the collection to be larger than the North Indian. But it is less than a quarter of the entire total of 26,000 coins; may be not more than five thousand, in number. The collection is still a remarkable one representing almost all the types of gold coins unearthed in South India. Coins of the Western and Eastern Chalukyas, coins of the Tamil powers, the Cholas and the Pāndyas and of more recent time of Vijayanagar and the Mysore rulers are a few noteworthy items, not to speak of the doubtful coinage of the numerous petty kingdoms like the Hoysalas and Yadavas, issued during the 11th and 14th centuries A. D.

An isolated series in the South Indian coin-collection, the Roman coins in the cabinet number more than two hundred. The collection is a remarkable one, and one of the best in the whole of India, built up entirely through treasure trove hoards in the South mainly found in and around the Coimbatore district bearing testimony to the commercial intercourse between Ancient Rome and Ancient India. Treasure trove hoards from Vellalur in Coimbatore district brought in 118 Silver. From Karivalamvandanallur in Tinnevelly, six Roman aurei were received in 1941 and also another hoard of 50 gold from Nandyal in Kurnool were acquired in 1934 and five denarii from Pollachi, Coimbatore, were received for the coin cabinet in 1948. The hoard from Nandyal acquired in 1934

included aureii of Augustus, Claudius, Nero and Domitian. Recently a hoard of aureii was found in the Kadamath-Amindivi group of islands and acquired for the Museum in 1949. The fifteen aureii in this hoard contained those of Vespasian, Antoninus Pius and Commodus. Roman copper coins in the collection were mostly purchased from private coin-collectors. A catalogue of the Roman and Byzantine coins in the Madras Museum has been prepared by Mr. T. G. Aravamudan and will be published shortly. It would be worth while noting here that Mr. Aravamudan, a well known numismatist, has already published a catalogue of the Venetian coins in the Madras Museum.

More than six thousand Andhra lead and potin coins are available in the Museum cabinet. A large number of them of a similar type, with an elephant on one side and Ujjain symbol on the other, without any legend on them, are worn out. Prof. M. Rama Rao has published a monograph on *Select Satavahana Coins in the Government Museum, Madras,* in which he has catalogued 223 coins of the Museum collection, 24 out of which were obtained from Amaravathi in the Guntur district and eleven from the Tarhala hoard. The findspots of the other coins are not known but they were probably "obtained during the course of excavations conducted on ancient Buddhist sites in coastal Andhradesa." Prof. Rama Rao has attributed 97 out of the 223 coins to the following eight Satavahana rulers: Gautamiputra Satakarni—41 coins, Vasisthiputra Pulumavi—17, Satakarni IV—5, Sivasri—2, Chandra Satakarni—1, Skanda Satakarni—1, Sri Yajna Satakarni—28, Karna Satakarni—1 and Saka Sada—1. The remaining coins could not be ascribed to any king with certainty as they do not contain any legends.

From the disappearance of the Andhras to the rise of the Pallavas, scarcely anything of numismatic interest is known. Of an enirely different technique from the Andhra coins are the *Padmatankas* or cup-shaped coins. These coins bear fine impressions in relief. The Western Chalukyan coins in the collection are of this type with legends in old Canarese, punched along with the device of a temple or a lion.

Other types of *Padmatankas* are available in the series, some having a lotus. Of much the same type as the Western Chalukyan coins are the coins of the famous Kodur treasure trove hoard unearthed in 1913 in the Nellore district and this type was subsequently copied by the Telugu Chola chief of the Nellore district in the thirteenth century.

Specimens of the Eastern Chalukyan coins in the collection do not represent more than three of the numerous princes whose names are recorded in inscriptions. The Chalukya princes portrayed the boar, their favourite object of worship, on their coins. Coins of the famous Eastern Chalukya ruler Raja Raja (1012-1052 A.D.) were found from Krishna district and also from Dowlaiswaram in East Godavari district. This hoard of Eastern Chalukyan and Chola gold coins was acquired for the Museum in 1946. The coins of Rajaraja bear the boar symbol in the centre with a lamp on each side and around the edge six punch-marks—his name, with one Telugu-Kannada letter, in each punch. Copper coins of this dynasty are also available here. A catalogue of the Eastern Chalukyan and Chola coins of the Dowlaiswaram hoard, unearthed in 1946, is under preparation. Prof. T. Balakrishnan Nair is publishing a bulletin on this subject for the Madras Museum.

Paucity of numismatic evidence characterises the coinages of the three great Tamil kingdoms too. Very few of the Chola *Pons* and *madais* have survived them. Among their few coins in the collection, mention may be made of the "Ceylon man" coins of Raja-Raja I in gold and copper and silver coins of Rajendra commemorating his conquest of the Gangetic valley. The famous Dowlaiswaram hoard brought to light two interesting coin types of Kulottunga I. These commemoration coins bear legends in Tamil Grantha characters, with the Chola dynastic emblem, the tiger with fish, bow and arrow, in the centre of the coin. The custom of incorporating on their coinage, the cognizance of the conquered nations, along with their dynastic emblem, seems to be a favourite device of not only the Choas but also other South Indian dynasties like the Pandyas.

Great difficulty is experienced when identifying the Pandyan coins in the collection. Brief legends appearing on these coins defy attempts at a proper identification. With the exception of their gold coins found probably in the South Canara district in 1910, and identified as coins of one Pandya Dhananjaya–evidently a Pandya chief, none of their copper coins with fish symbol and Tamil legends issued during the 10th and 13th centuries A.D. can be attributed to any one particular ruler as the titles found on them were titles of not one, but many rulers. Mention has already been made of the Bodinaikkanur hoard of Pandyan punch-marked coins, the earliest Pandyan coins in the series. The Madura rectangular copper coins in the series, die-struck pieces with

Buddhist devices on them probably of the 4th-5th centuries A.D., are other early Pandyan coins in the collection.

The Vijayanagar pagodas and half pagodas in the collection are typical South Indian die-struck coins. These pagodas with their half and quarter divisions started a new fashion in South Indian coinage, and lasted from the 14th century to the 19th century A.D.—a period of five hundred years. The Vijayanagar coins in gold and copper abound in large number and great variety, issued by almost every ruler of all the three lines, with figures of deities—Śaivite and Vaishṇavite. It was not unusal for the same sovereign to exhibit his religious neutrality by issuing coins with Śaivite and Vaishṇavite deities. The Vijayanagar series of coins was built up mainly through treasure trove hoards and recently more than two hundred copper coins were added by purchase from private coin-collectors to make the collection complete.

The two Mysore Sultans, Haidar Ali and his son Tipu Sultan, during their short rule of thirty eight-years in Mysore, issued a very large variety of coins. The Museum has the best collection of coins of these two Sultans, part of the copper collection acquired by purchases in 1904-1905 from Udipi in South Canara. The gold coins were found as treasure trove hoard. While Haider Ali issued pagodas and panams with figures of Umā-Maheśvara on the side, following the pattern of the coinage of the conquered, Tipu Sultan filled his coins with religious inscriptions. His coins were named after the first four Caliphs, muslim saints and Heavenly bodies, and were issued from his various mints in the south. Some of his coins are the earliest South Indian coins to have a crude milling. The Travancore coin-collection in the Museum was built mainly through the gifts received from the Maharajas of Travancore. Special mention must be made here of the *Tulabhara Kasus* in the collection presented by the Maharaja of Travancore in 1877, to which were added subsequent gifts of Travancore gold, silver and copper coins.

Finally, mention may be made of the coins issued by the European powers from their factories in India. The Madras Museum possesses a good collection of these coins of which the coins of the English East India Company, the Indo-Danish and the Indo-Portuguese are the best, thanks to the efforts of Dr. Edgar Thurston who took special interest in the Indian mintages of these European powers. Basing their mintages on the native coinage, these European nations issued coins for their settlements in the South from their mints and their

currencies went out of circulation when their power declined in the south.

Our collection of coins are arranged in coin cabinets, specially designed for them. They will be shown to bonafide student of coins, or to groups of students, and to scholars if they apply to the Superintendent.

THE COIN-COLLECTION IN THE ARCHÆOLOGICAL MUSEUM, MATHURA

V. N. SRIVASTAVA

The history of coin-collection in the Archæological Museum, Mathura may be said to have started with the inception of the Museum in 1874. No serious attention, however, seems to have been paid in this regard as sculptural finds alone engrossed the attention of authorities. So much so that when in 1910 Dr. Vogel prepared his famous catalogue, only 13 coins including 6 of gold were found in the Museum's coin cabinet. These coins, too, were presumably passed on to D. G. A. as was the case with earlier and subsequent collection as known from records.

In course of time, however, coupled with a number of discoveries of coins in this region, attention was paid towards the acquisition of coins also and the coin cabinet began to swell. With the appointment of an Art Purchase Committee by the Government in 1957, purchase of gold and other coins has became a regular feature and there are at present 9332 coins the Museum's coin cabinet. These include 109 gold coins, 1930 of silver, 7284 of copper and 60 coins of alloy and other metals— a majority of them having been acquired locally.

The gold coins may be classified into three groups : (1) those of Kushāṇa dynasty, (2) of the Gupta rulers and (3) certain issues of medieval kings including the coin of Roman emperor Carcella. It has, however, not been possible to acquire all the coin types of Kushāṇa and Gupta rulers, and many an important coin type and varieties are yet to be procured.

The Kushāṇa series consists of 27 coins including 1 of Vima Kadphises, 5 of Kanishka, 6 of Huvishka, 1 of Kanishka II, 3 of Vasudeva and 11 coins of Later Kushāṇa kings.

Emperor Chandragupta I is represented by a solitary coin and Samudragupta by 5 of Standard type, 2 of Archer type, 3 of Battle-axe type, 4 of Lyrist type, 4 of Aśvamedha type and 2 of Kācha type. Only 4 coins types of Chandragupta II are available viz. 4 coins of Chhatra type, 12 of Archer type, 3 of Lion-slayer type and 3 of Horseman type. Kumāragupta I is represented by Swordsman type (1 coin), Lion-slayer (6), Archer (4), Horseman (5), Tiger-

slayer (1), and Peacock (2). The Museum possesses only two coin types of Skandagupta viz. King and Queen type (1) and Archer type (3). Narasimhagupta, Kumāragupta II, Budhagupta, Vishṇugupta and Śaśāṅka have one each, while Prakāśāditya is represented by 2 coins.

The third catgory coinsists of 9 coins : Gangeyadeva (3), Naravarmadeva (1), Hellecteshanevarma (1), Kumarapala (1), Carcella (1), and two very debased coins of Pratapaditya of Kashmir and Vinayaditya respectively.

Obviously our coin cabinet is not so rich as the repertoire of sculptures and terracottas. Nevertheless, some of the gold coins are of outstanding merit. Mention may be made in this connection of a gold stater of Kushāṇa emperor Kanishka I notable for its perfect state of preservation and a quarter stater of Huvishka which is rarely found. Outstanding among the Gupta coins are an Aśvamedha type coin of Samudragupta of broad variety and showing on the obverse the horse with two straps— a novel feature ; coin of Lyrist type var. A, with footstool and without symbol, the king wearing a pearl bordered Kashmiri cap and having long moustaches—a unique feature ; and an Archer type coin showing on obverse, besides king, a crescent above *Garuḍa* with legend *Apraratha Vajatya* etc. There is only one coin of this type in Bayana hoard and one in St. Petersburg. Usually the legend is *Apratiratha*, whereas *ti* is entirely omitted from the present coin. Of the coins of Chandragupta II one Horseman type coin (cf. *BMC*, Pl. X. 4) is unique. Yet another coin of this ruler deserving attention is the Lion-slayer type which has a complete legend, besides being in a perfect state of preservation with a remarkable delineation of the figure–a remarkable feature. The Kārttikeya type coin of Kumāragupta I is another outstanding discovery. It shows Kārttikeya on a peacock perched on a leafy platform—a feature seldom occuring on the coin. There is only one coin of this type in Bayana hoard and one in St. Petersburg. Mention may also be made of the coin of Prakāśāditya for introducing a new symbol unknown to us so far.

The silver coins numbering 1930 include punch-marked coins with new symbols, besides 12 coins of the earliest series, coins of Indo-Greeks and Indo-Parthians, and Indo-Sassanians, and a few issues of Gupta rulers.

Among the copper coins, there are a large number of Kushāṇa coins. Other dynasties represented in this category include the Nāgas, local rulers of Mathura, Tribal coins and some coins from various ancient sites such as Kauśāmbī,

Ahichchhatra and Taxila. Of these, the coins of Sodasa and a coin of Rāmagupta deserve mention.

The 60 coins of billon and other metals include a few Drammas and issues of Muslim kings.

It has not yet been possible to prepare a catalogue of our collection. Nor has it been possible to study these coins in detail so far due to many unavoidable circumstances. Attempts are, however, being made in this direction and it is hoped that very soon we shall be able to bring to light all these coins in a catalogue to enable the scholars to study them in detail.

THE COIN-COLLECTION IN THE CENTRAL MUSEUM, NAGPUR

V. P. RODE

The museum which was established in the year 1863 seems to have started its coin-collection early as the first recorded date of receipt of some silver and copper coins from Major Pearse R. A. is the year 1867. The museum has been regularly receiving treasure trove coins, but for many years there was no numismatist on the staff of the museum. The first catalogue of coins in the museum was prepared by Mr. G. B. Bleazby which was published in 1908. There are twelve sections in the catalogue in which the collection has been classified. It was only in 1912, when Mr. Natesan Aiyer was taken on the staff, that the catalogue of ancient, medieval and modern Indian and foreign coins was prepared on scientific lines, but it was not published. Mr. M. A. Suboor, a keen student of Muslim numismatics, prepared two catalogues of coins of the Sultans of Delhi and their contemporaries and those of the Mughals and their contemporaries but these catalogues also were not published. In 1919 Mr. Suboor was appointed as Coin Expert. The Coin Expert was required to report on the treasure trove finds of coins recovered in the Central Provinces & Berar in addition to his own duties. A list of coins acquired during the year was appended to the Annual Reports of the museum, but since these Reports were discontinued and Triennial Reports were published from 1922-23, this practice stopped.

Since the museum was on the list of institutions to which treasure trove coins were supplied, it was receiving quite a good number of coins for its coin cabinet every year. As the number of finds of Muslim coins has been more than that of ancient and medieval coins, the collection of Muslim coins in the museum is bigger than the collection of ancient and medieval coins. Nevertheless the collection of ancient and medieval coins in the museum is fairly representative and contains the coins of all the well known dynasties. The earliest coins represented in the collection are the punch-marked coins. The coins of Dhapewara (Balaghat) hoard discovered in 1893 belong to the pre-Maurya period. Another interesting find of the punch-marked coins which includes Māśaka coins comes from Thathari in the Bilaspur district (*JNSI*, XIX). A coin from the Bhandara hoard of *Kārshāpaṇa* coins deserves special mention as it bears

an Owl symbol which has so far not been found on any other punch-marked coin (*JNSI*, X, p. 75). There is quite a good collection of Sātavāhana coins in the museum as it contains the issues of the recently known kings from the Tarhala hoard discovered in 1939 and published by Prof. Mirashi (*JNSI*, II). There are two gold coins of the Kushāṇas, which come from Harda. One is a quarter stater of Huvishka and the other a stater of Kanishka III (*JNSI*, XVII). The museum has representative collection of the coins of the Western Kshatrapas as it contains 89 coins from the Sonepur hoard from the Chhindwara district (*NS*, XVII, article No. 345). Of the Gupta coins in the museum, one coin of Chandragupta II is most interesting as it is of a rare variety of the Chhatra type (*JNSI*, XVII). The museum possesses some interesting coins of the contemporaries of the Guptas. The gold coins of the Nala kings which are known from the Edenga find in Bastar are in the museum cabinet (*JNSI*, I, p. 29). Museum possesses the repoussé coins of Mahendraditya and Prasannamatra (*JNSI*, X, p. 13 H, & *JNSI*, XVII, p. 215 H). The silver coins of Krishnaraja, the Early Kalachuri ruler, deserve special mention (*JNSI*, III). Of the coins of the medieval period, the collection of coins of the Kalachuris of Dahala and Dakshina Kosala is fairly rich. There are all the known types of Gangeyadeva's gold coins. The coins of Isurpur (Sagar) find are thick and small while those of the Barela find are of usual type (*JNSI*, XVII, pp. 110-111). The coins of impure metal look like silver coins. The Museum possesses almost all types of gold and copper coins of the Kalachuris of Dakshina Kosala. Gold coins of Someśvara of Chakrakota deserve special mention (*JNSI*, III, XVI). The Western Chalukya coins from Bhadravati are interesting. The coins of Jagaddeva Paramara discovered at Rohinkhed in the Buldhana district also deserve special mention (*POC*, 1946). The Museum possesses the *Padmatankas* of the Yadava rulers, Singhana, Mahadeva and Ramachandra. The collection of Vijayanagar coins is also quite representative. Of the copper coins of the Gond rulers, those of Jatba are interesting.

The collection of coins of the Sultans of Delhi and their contemporaries in the museum is fairly rich. The cabinet contains gold issues of Nasiruddin Mahmud, Alauddin Khilji, Ghiyasuddin, Muhammad bin Tughluq and Firoz Tughluq. Gold coins of the contemporaries of the Sultans of Delhi are those of Ghiyas Shah, Mohd. Shah and Nasir Shah of Malava, Mohd. Shah of Gujrat and Ahmad Shah II and Mohd. bin Humayun Shah of Gulburga.

The museums collection of the Mughal coins is the richest, in which are represented several interesting, rare and newly known mints of the Mughal rulers. The new mint in gold of Aurangzeb represented in the collection is Lucknow (*NS*, XXX, 1911). New mints in silver of the same ruler are Parenda, Kanji and Nasratgarh. New mints in the same metal for Shah Alam Bahadur are Azamnagar and Parenda ; for Farrukhsiyar, Bankapur, Sikakul and Shakola ; for Rafiuddarjat, Bankapur ; for Shahjahan II, Bahadurgarh ; for Mohd. Shah, Kakurti and Sikakul ; for Alamgir II, Qandahar and for Shah Alam II, Elichpur and Asafabad Ujhani.

Of the total number of 224 Mughal gold coins in the museum, 102 coins are of Aurangzeb in which 18 mints are represented.

THE COIN-COLLECTION IN THE NATIONAL MUSEUM, NEW DELHI

I. D. MATHUR

During the past 12 years of its existence, the National Museum has built up a sizeable collection of about 24,000 coins, including about 1,800 gold coins, and the rest silver and copper, and a few foreign coins, largely through purchase, gifts and treasure trove distribution. The National Museum has the privilege of being the first in the list of museums in India which are entitled to a share of any treasure trove find in any part of the country, coming only after the museum of the treasure trove region. Even as regards its collections, the National Museum is in possession of coins of some of the best known varieties and some rare coins of India. Its large and representative collection, consisting of important varieties, ranges from the earliest punch-marked type to the latest East India Company coins, spanning a period from the 6th century B. C. to about the middle of the 19th century A. D. It is composed of coins acquired from some of the best known private collections like the Parruck collection of 1691 Sassanian coins, the Bayana hoard of Gupta gold coins of which the Museum has around 600 pieces (73 choice pieces of this hoard were presented by the Maharaja of Bharatpur through the President of India, and the rest purchased), 4,099 coins of Narayani hoard presented by the West Bengal Government, 1680 coins of the Parthasarthy collection, 4,407 coins of the S. T. Srinivasagopalachari collection and 7,846 coins of the Jalan collection, to name a few. As early as 1950, Mrs. Birbal Sahni presented to the National Museum a collection of coin moulds belonging to the Yaudheyas collected from Khokrakot, Rohtak, of the early variety of cast coins. The collection is a valuable possession of the Museum inasmuch as it shows the ancient Indian technique of casting coins.

The earliest series comprises, among others, punch-marked, Indo-Bactrian and Indo-Scythian coins of different varieties, besides the local issues from Taxila, Avanti, Ujjayini, Mathura and several other places. Of the punch-marked coins of which the National Museum has more than a thousand pieces, there are varieties of both the early and later groups with usual symbols of the Sun, the Taurine, the Lotus, the Tree-in-railing and miscellaneous animal figures.

Of the Sassanian coins, we have a gold coin issued by Shapur II and the rest silver and copper issues of the kings from Papak to Yezdegerd III including rare and unique pieces.

The next distinctive series is that of the Gupta gold coins of which the Museum has some new and unique specimens, for example, *Chakradhvaja* type of Kācha, King and Queen on couch type of Chandragupta II, Lion-slayer, Rhinoceros-slayer, Lion-trampler-Elephant-rider types of Kumārgupta I and King and Lakshmi standing type of Skandagupta.

Of those belonging to the medieval and later periods of the North, mention may be made of the coins of Harsha, Śaśāṅka, Samantadeva and the Gāhaḍavālas and Tomaras respectively of Kannauj and Delhi, besides a number of Cooch Bihar, Nepalese and Tibetan issues.

The Museum collection of South Indian coins has lately been greatly enriched by the acquisition of two important collections acquired from Shri Parthasarthy and Shri S.T. Srinivasagopalachari. The coins of the Sālankāyanas, Vishṇukuṇḍins, Eastern Chalukyas, Pallavas, Cholas, Cheras, Pāṇḍyas, Sultans of M'abar, Setupati, Traikuṭakas, Western Kshatrapas, Bahamanis, Andhras, Vijayanagar are now fully represented, thus filling an important gap in the representative character of the Museum collection.

The Muhammadan series include coins both of the Turko-Afghan and the Mughal periods. In the first group we have a unique bilingual silver coin of Mahmud of Ghazni containing, on one side, *Kalima* in Sanskritized version in the 11th century Nāgarī characters, and on the other side, the name and titles of the Sultan in Arabic and Kufic script; another unique coin of Nasir Shah Khalji with scalloped borders, and a few rare coins of Allaudin Mohammad Shah. Out of the large collection of coins of the other Sultans of Delhi and the Mughals, mention may perticularly be made of a rare issue of Akbar with a hawk against a floral background, signifying his conquest of the Deccan, Zodiac coins and a coin showing the portrait of Emperor Jahangir.

The collection of coins purchased from Shri Hira Lall Jalan of Patna has 7846 old coins. These include, 1 punea marked coin, 196 European silver, 1631 Muslim and Indo-Sassanian silver coins, 1700 silver Mughal coins, 178 gold Mughal coins, 78 gold coins of Sultan of Delhi, 107 miscellaneous gold coins, 82 Indo-Greek coins, 116 Gupta gold coins, etc.

Besides the above, there is a large number of coins of the native States of India such as Malava, Gujarat, Lucknow, Indore, Jodhpur, Gwalior, Jaisalmer, Bhopal, Datia, Udaipur, Orchha, Ratlam, Bundi, Kotah, Jhalawar, Chanderi, Maheswari, Jaipur, Hyderabad, Baroda, etc.

Of the foreign coins, the National Museum has those from Mexico, Egypt, China, Ghana, Ceylon, Argentina, Belgium, France, Africa, Iran, etc.

RAI SAHEB CHANDRIKA PRASAD COLLECTION OF THE NUMISMATIC SOCIETY OF INDIA

P. L. GUPTA

In 1953, Srimati Ramdulari Devi bequeathed to the Numismatic Society of India a collection of coins which belonged to her father Rai Saheb Chandrika Prasad of Ajmer, who was a member of the Society in the early days. On the death of Srimati Ramdulari Devi, the executors of her bequest, transferred the collection to the Society. Since the Society had no place of its own, it was kept in the custody of the Prince of Wales Museum. Recently it has been transferred to Varanasi and is now kept with the Bhārat Kalā Bhavan.

Silver Coins

The collection consists of 121 gold and 16 silver coins and medals. The silver coins unfortunately are of no value. They are looped and were used as ornament ; hence they are sufficiently worn. They are the coins of the East India Company of Farrukhabad mint of the year 45.

Gold Coins

ANCIENT

Among the gold coins, one is a Kidara coin and two belong to the Gupta dynasty. One of them is the Archer type of Chandragupta II and the other is the Horseman type of Kumāragupta I. Unfortunately the latter is very badly battered. A pagoda of Pradapa Devaraya is also there. Besides them, there are two tokens ; one is of Khanderao and the other is a base gold Gupta imitation.

SULTANATE PERIOD

The remaining coins are of the medieval and the modern period. 12 of them belong to the Sultans of Delhi (3 of the Khilji, 8 of the Tughluq and 1 of the Suri dynasty). Among the Khilji coins, two belong to Firoz II (*DMC*, 280) and one to Mubarak I (*BMC*, 368). Of the Tughluq coins, one belongs to Tughluq I, 5 to Muhammad III and one to Firoz III. All are of Delhi mint and dated 717, 724, 725, 726, 733, and 736. The Suri coin is of Shershah. Besides these there is a coin of Muzaffar II of Gujarat dated 926 A. H. This is a rare specimen of this dynasty known in gold. Three

coins belong to Malava Sultans-one to Muhammad I and two to Ghiyas Shah.

MUGHAL

Among the Mughal coins, 18 coins belong to Akbar, 4 of which are imitations; 10 belong to Agra (dated 970, 971, 973, 974, 975, 49 Aban), 2 to Ahamedabad (dated 984 and xx6), 1 to Urdu Zafar Quarin (dated 985). The latter is a rare piece. The remaining one coin is a square piece dated 97 on which the mint is not clear.

There are a set of 12 Zodical imitations of Jahangir in this collection. They are fine in their appearance. Shahjahan's coins are 8 in number; two are of Akbarabad, one of Allahabad, one of Burhanpur and three of Daulatabad. Aurangzeb's coins are 5, one each of Ajmer, Akbarabad, Aurangabad, Multan and Shajahanabad mint.

Of the Later Mughals, one coin is of Rafiuddarjat, two of Shahjahan II, five of Muhammad Shah, one of Ahmad Shah, one of Alamgir II, one of Shahjahan III and two of Shah Alam II. Of these, Muhammad Shah's coin of Islamabad and half-muhar of Shahjahanabad are interesting. The latter is exceedingly rare.

Then there is a coin of Ahmad Shah Durrani of Dara mint. Sixteen coins belong to the Nawabs of Awadh. Five of them are of Ghaziuddin Haider, four of Muhammad Ali, two of Amjad Ali and six of Wajid Ali.

NATIVE STATES

Among the native State coins, there are 7 coins of Jaipur belonging to Ramasingh, one of Udaipur and one probably of Bundi.

EAST INDIA COMPANY

Two coins are of the East India Company of Murshidabad mint. One of them is a quarter muhar. There is also a five rupee muhar of the Company. Two double-asharfi of William IV, one asharfi of Queen Victoria and two muhars dated 1862, 1882 of the British period are amongst the other coins.

FOREIGN

The remaining 6 coins are foreign. Three belong to France and two to South Africa, and the sixth coin is an imitation of the Venetian ducat.

Medals

Amongst the medals, the most noteworthy is the portrait medal of Ghaziuddin Haider, the Nawab of Awadh, which he had issued on the occasion of his coronation in 1234 A. H. The other medals are mostly war medals of the British period as follows :

1. Burma Medal 1887-89 (silver).
2. Central India Medal 1857-58 (silver).
3. N. W. Frontier Medal (silver).
4. Punjab Medal 1849 (silver).
5. Afghanistan Medal 1878-79-80 (silver).
6. India Medal (silver).
7. Tibet Medal 1903-04 (silver).
8. Delhi Darbar Medal 1911 (silver).
9. War Medal 1914-15 (bronze).
10. The Great War Medal 1914-18 (bronze).

This collection of coins and medals in itself is neither rich nor very important; but it is hoped that it would serve the purpose of a nucleus for a Numismatic Museum in the times to come.

THE COIN-COLLECTION OF THE PRINCE OF WALES MUSEUM, BOMBAY

P. L. GUPTA

The Prince of Wales Museum of Western India, Bombay, has about 30,000 coins in its Numismatic Section and they cover almost all the series of Indian coins as well as include coins of Ancient Greece, Rome and Persia and also some modern coins of the world. The collection has been built from the presentation of the treasure trove coins by various State Governments of India, gifts and purchases.

Treasure Trove Coins—The Bombay Branch of the Royal Asiatic Society was from the very beginning dealing with the treasure trove finds of the Bombay Presidency. It appears that it began to set apart coins from the treasure trove finds for this Museum as early as 1907, soon after the idea for establishing the Museum took the concrete shape and the foundation stone of the building was laid by the Prince of Wales. These coins remained with the Society and were sent to the Museum in 1920, when the Museum started functioning. Since then the coins from the treasure troves found in various parts of the State have been regularly presented by the Government. In the selection of these coins, the Museum had its direct hand from the very beginning. Since the Bombay Branch of the Royal Asiatic Society had no coin expert with them, with the establishment of the Museum, they began to send the treasure trove coins to the Museum for examination, and in lieu they agreed to give to the Museum the right of first selection of the coins from the treasure troves examined by it. This arrangement continues even now, though the work of the disposal of treasure troves has now been taken up from the Society and given to the Director of Archives and Historical Monuments, Maharashtra Government. As such the Museum collection contains almost all the selected coins of the treasure troves which were discovered during the last forty years and came to the notice of the Government.

The Museum collection also includes coins from the treasure troves found in other States of India. The State of U. P. placed the name of this Museum in its distribution list as early as April 1917; Madras in January 1918, Bihar in September 1918 and the Central Provinces in 1918. Of these States, however, U. P. and C. P. are the only ones regularly

sending coins to the Museum. Bihar after some years in the beginning, totally stopped to send. Coins from Madras were received regularly for some years in the beginning but now for the last fifteen years, the Museum has recieved coins from them only on some rare occasions. Coins from a few other States were also received occasionally. The coins received from the treasure troves, belonging to other territories, are neither many nor representative.

Poona Archæological Museum Collection—The office of the Superintendent, Archæological Survey of India, Western Circle, Poona, was maintaining a small museum. It had a quite good collection of a few thousand coins, representing many of the Indian series. This collection appears to have been formed from the treasure trove coins, received from various sources. This Museum was abolished in 1914 and its collection was transferred to Prince of Wales Museum. It forms a good part of the numismatic collection of the Museum.

P. V. Mavji Collection—In 1915, a big collection of art and antiquities belonging to Purushottam Vishnu Mavji was purchased by the Board of Trustees of the Museum. It included 3486 coins belonging to different series of Indian coinage.

Howell Collection—In 1916, a small collection of about 600 coins, belonging to Capt R. M. Howell of S. & T. Corps was purchased from his widow. This collection was a representative one and was rich in Indo-Greek and Gupta (gold) coins and included a few rare types that were hardly known then. It also included 80 coins of ancient Rome and Greece, which are of a peculiar interest and importance as they were all acquired from Kohat and the surrounding regions by Capt. Howell.

Whittle Collection—Major H. M. Whittle is well known to Indian numismatists as an active member of the Numismatic Society of India and for his studies in the coins of the Sultanate period. His collection of about 900 coins belonging to the Sultans of Delhi, Bengal, Jaunpur and Gujarat (silver and copper) was purchased by the Museum in 1920.

G. P. Taylor Collection—Dr. G. P. Taylor was one of the founder members of the Numismatic Society of India. His work on the coinage of Gujarat and Saurashtra area (Sultanate and Mughal periods) is well known. He parted with his collection in 1917. His Sultanate copper coins were purchased by the Indian Museum, Calcutta and the collection of the coins of Gujarat Sultans by Sorabshaw M. Contractor of

Bombay. In 1922, when the Indian Museum disposed off duplicates from this collection, this Museum purchased about 200 coins. Likewise, S. M. Contractor sold Taylor's collection of Gujarat coins to this Museum in 1930.

Da Cunha Collection—Dr. J. G. da Cunha was another notable coin-collector of Bombay and belonged to the early generation of numismatists. Though known for his works on Indo-Portuguese coins, he had collected almost all series of Indian coins, which were published in three volumes of a sale catalogue. Some of his coins were purchased by this Museum at intervals. They are mostly Sassanian, Parthian and Oriental Muslim coins.

Sir Currimbhoy Ebrahim Collection—Sir Currimbhoy Ebrahim was one of the notaries of Bombay. He had a collection of several thousand coins. Out of them, about 1,200, belonging to Delhi Sultans, Mughals and the Oriental Muslim dynasties, (which the Museum selected), were presented to the Museum in 1925.

S. M. Contractor Collection—A collection of about 550 coins of the Mughal dynasty was purchased in 1931 from S. M. Contractor, who had earlier sold to this Museum the Taylor collection of the coins of Gujarat Sultans.

S. H. Hodivala Collection—S. H. Hodivala is widely known to the numismatists for his masterly papers on Mughal numismatics based on literary material; but he also had a fine collection of coins that he had procured in Saurashtra. This entire collection was purchased by the Museum in March 1932.

F. D. J. Paruck Collection—F. D. J. Paruck was a well known scholar of Sassanian numismatics and also had a very good collection of Sassanian coins. From time to time, between 1932 and 1937, he sold to the Museum, duplicates of the Sassanian coins from his collection, and thus enabled the Museum to build a very good collection of Sassanian coins.

Sir Dorab Tata Collection—The Museum has recieved from Sir Dorab Tata Trust about three hundred coins belonging to Greece, Parthia, Persia and India. Some of them were foreign modern coins also.

G.J.M. Hamilton Collection—G.J.M. Hamilton was in the Services of the Gwalior Government and was a fine coin-collector. His collection of Malava coins was the finest and on them H. N. Wright had based his renowned papers on Malava coins published in the *Numismatic Chronicle*. That collection, comprising 444 coins, was purchased by this Museum in 1935.

Besides these collections, there are coins either purchased as stray coins from the coin-dealers or acquired from other sources.

Though the above collections of the Museum are impressive, the acquisition had so far no planning or system. No scientific classification or systematic study of the coins acquired was made. Consequently, while there is a bulk of duplicates on the one hand, on the other there are big gaps in almost all the series.

The punch-marked coins in the Museum consist of a few coins of local series, viz. bent-bars of Gandhara, cup-shaped of Kosala. A few coins of the variety mentioned by Allan, Elliot and others as Konkan find are also in this Museum. But the findspot is nowhere recorded. The Bahal hoard of 655 coins and 5 fragments of the five-symbol series form the bulk of the collection. A few stray coins of this series from Akalkot and Vadia are also here. The uninscribed cast coins and the coins of the local and tribal rulers of the north-west are few. A few coins of the Yaudheyas found in Dehradun district, presented by U.P. Government, are the only notables in this series. Indo-Scythian, Indo-Parthian, Indo-Greek and Kushāṇa coins are fairly represented in the collection. The notable ones from these series were published by A. S. Altekar (*JNSI*, XI, pp. 44-63). The Sātavāhana copper coins are few and are fron Tarhala finds. The Museum, however, possesses a silver coin of Vaśishṭhīputra Śātakarṇi. It was published by Altekar in the above paper. Kura coins are fairly represented from the Brahmapuri finds. The silver coins of all the Western Kshatrapa rulers are there in the collection and some of them bear dates which are not known elsewhere. Yet, the collection is not as much representative as it ought to have been. The coins of this series here are rarely from any hoard. Copper coins of Western Kshatrapas are few, but some of them are notable and are published (Altekar, *JNSI*, XII, pp. 5-7; Gupta, *JNSI*, XXI, p. 133). The Gupta gold coins in the Museum are not many and are from three distinct sources: (i) Howell collection, (ii) Bayana hoard and (iii) Kumarakhan hoard. The Howell collection contains a Couch type coin of Chandragupta II (Var- E. of *Coinage of Gupta Empire*). Eight of the nine coins of the Kumarakhan hoard, which is the only hoard of Gupta gold coins from western India, are in this Museum. A few silver coins of Chandragupta II of the eastern India and the coins of Kumāragupta I and Skandagupta of western India are in the collection. A few copper coins of Kumāragupta are also here. Post-Gupta coinage like

Indo-Sassanian and Gadhiya are fairly represented. Among the Gadhiya coins a few are of rare varieties like horseman type and those which have the legends *omkara* and *Chhittarāja*. The latter belong to Chhittarāja of the Silahāra dynasty. The medieval gold and silver coinage of Eastern India are few.

Among the Muslim series, the silver and copper coinage of the Sultans of Delhi, Malava, Gujarat, Jaunpur and silver coinage of the Mughal emperors are well represented in the collection; yet they have many gaps, particularly of dates and in some cases, of the mints too. The coins of the kingdoms of Deccan here are not quite representative.

There are a large number of post-Mughal coins of the local chiefs, but they are yet to be properly classified. Since most of the coins of this series bear the names of the Mughal rulers, and their mint marks have not been identified with any particular locality, it has not been possible to assign them properly.

The issues of the East India Company and the British Government are few. The Indo-Portuguese coins are many in the collection, but are yet to be properly classified.

Among the South Indian coins, copper coins are few. Gold coins of the *padmatanka* and the *pagoda* types and of *fanam* variety are many. Some of the *padmatankas* have legends also in Tamil or Telugu, but they have not yet been properly studied. Other South Indian coins are those of the Yadavas of Devagiri.

Greek, Roman, Parthian and Sassanian silver and copper coins are in quite a large number, but they require proper classification and study. There are a few Roman gold coins also, which belong to the finds of south India. Besides these foreign coins there are many copper and silver coins of modern world, but they are like a haphazard collection.

It has now been decided by the Board of Trustees to confine the collection of coins to Indian series only and to keep only those foreign coins that have been found as treasure trove in any part of India or have some bearing on Indian history. So, the coins are being classified and properly enlisted and indexed on cards. It is proposed to reduce the number of coins to minimum by taking out the unnecessary duplicates, which will be sold or kept for exchange with such coins which would fill up the gaps. It is also proposed to bring out catalogues of various series in the collection. Preliminaries are being done to effect these proposals.

THE COLLECTION OF INDIAN COINS IN THE RAIPUR MUSEUM

BALCHANDRA JAIN

The museum at Raipur was established in the year 1875 by late Mahant Ghasidas, the then ruling chief of the Nandgaon State, now a tahsil of the Durg district of Madhya Pradesh. In 1953, the management of the museum was taken over by the State Government and the new institution, named the Mahant Ghasidas Memorial Museum, came into existence, in which the old Raipur Museum was merged. Accordingly, along with other exhibits, a small collection of 102 coins and 41 medals was transferred to the new museum which formed the nucleus of its coin-collection. The above coins are said to have been found in the Balaghat district and various places of the Chhattisgarh, while the medals which belong to the Indo-British period of the Indian history, were received from the Secretary to the Chief Commissioner of the former Central Provinces.

During his term of appointment as the Asstt. Curator of this museum, Shri V. P. Rode (1953–56) made numerous efforts to increase the collection and he succeeded in acquiring 117 coins. These were received from the Deputy Commissioner, Raigarh district (Æ 9, Æ 2, and Æ 3), Shri Bhura, a businessman of Seoni (Æ 1 and Æ 9), Shrimati Doongaji, Raipur (Æ 19), Shri Narayanlal Parmar, Raipur (B. 1), Shri Banjari, Raipur (Æ 13) and Dr. Kothari of Raipur (60 foreign coins including ancient Roman coins).

Thus, the strength of the coin-collection of the museum at the end of the month of October 1956, when the writer of these lines assumed charge of it, was : 219 coins, 41 medals and 2 tokens.

I had come on transfer from the Central Museum, Nagpur where I was holding charge of a collection consisting of about 10,000 coins that represents almost all the periods of Indian history. Naturally, I was not satisfied with the then strength of the collection of the Raipur Museum and I decided to make fresh efforts to build up a representative collection of coins of the various periods. Fortunately, in the early months of 1957, the discovery of a gold coin in the Betul district was reported and ultimately, the coin was

presented to the Raipur Museum by the Deputy Commissioner of that district under the orders of the Commissioner of the Bhopal division. The coin when examined was found to be the issue of the Bahamani king Mahmūd II, son of Muhammad II. That was a good beginning.

In the same year, Shri Vidya Charan Shukla M. P., Nagpur, donated to the museum, one tiny gold and five copper coins from the collection of his father, late Pandit Ravi Shankar Shukla, the former Chief Minister of Madhya Pradesh. The copper coin included an ancient Chinese coin found in the Bilaspur district and four uninscribed local coins of ancient South Kosala. Similarly, Shri Ramchandra Swarnakar of Katni (M. P.) was pleased to spare from his collection, 2 silver and 32 copper coins of the British period. At the same time, thirteen Ellichpur mint copper coins of Mughal emperor Muhammadshah and six other coins of the modern Indian States were acquired by me from various sources. Thus the strength of the collection of the museum on the 31st of March 1958 was : gold 11, silver 70, copper including bronze etc. 206 and medals 43. A list of these was prepared and published in March 1958.

The financial year 1958-59 witnessed the largest acquisitions; in all 6 gold, 256 silver and 898 copper coins were added to the collection during that year. Of these, 2 gold coins of Kalachuri Gāṅgeyadeva which were found at village Karitalai in the Murwara tahsil of the Jabalpur district and 167 silver Mughal coins were presented by the Collector, Jabalpur district; 15 silver coins including the issues of the English East India Company having the names of William IV and queen Victoria and those of the old Bhopal State (Shahejahan Begum) were received from the Tahsildar of Raisen (M. P.); while a lot of 30 silver and 8 copper coins of the Sultans of Malava came from the Collector, Sehore district. It was in that year that 4 gold, 10 silver and 25 copper coins were purchased from the museums of Nagpur, Lucknow and Madras while two silver coins of Victoria, one bronze Pāñchāla coin and five coins of the modern Indian States were obtained locally.

Shri S. N. Bhargava of Nagpur possesses a very good collection of ancient and modern Indian coins. Acceding to my request, he very kindly presented 54 copper coins and a clay sealing to the museum. His donation of a few early indigenous coins called for the immediate endeavour to enrich the collection by acquiring the early cast, and uninscribed coins, and coins of cities, guilds, republics and early

dynasties. Incidentally, in the month of April 1958, when I was on a tour of Bhopal in my private capacity, I met a coin-collector of Vidiśā who possessed about 2,000 ancient Indian coins collected by him from Vidiśā and Ujjain. The collection was examined jointly by Shri K. D. Bajpai, the then Curator of the Archaeological Museum, Mathura, and myself. We purchased the lot comprising about 1,700 coins for our respective museums for a total price of Rs. 500/-. The collection was divided in two equal shares, and the one which came to the Raipur Museum contained 32 silver and 803 copper coins including the silver punch-marked, early cast and uninscribed, tribal coins of Eran and Ujjain, coins of the city of Vidiśā, coins of Rāmagupta, Western Kshatrapas, Nāga kings of Padmāvatī and many other ancient Indian coins.[1]

In 1959-60, the first coin added to the collection of the museum was a gold coin of Narasimhagupta which was purchased from Varanasi. Coins found in the Sirpur excavations of 1956 (one gold coin of Prasannamātra, one Chinese copper coin) and 104 copper Kalachuri coins and that of Paseva (117 billon coins of the Sultans of Delhi and one Śrīdāma coin) were also added to the cabinet in that year. The most important acquisition of the year was the hoard of 46 gold coins of Mahendrāditya and 3 gold coins of Kramāditya discovered in the village Pitaiband of Raipur district.[2]

During last year (1960-61), the Collector, Raipur district, presented two hoards consisting of 119 silver coins of the Mughal emperors and 84 silver coins of the Bhonsle rulers of Nagpur (issued in the name of Ahmedshah from Kaṭak mint ?). Third hoard was received from the Tahsildar of Sihora, district Jabalpur. It contained 138 copper coins of the Sultans of Malava, most of which are the issues of Hosangshah. Similarly, three silver seals of the old Bastar State and one Indo-British medal were transferred to the Museum from the Jagdalpur treasury under the orders of the State Government. Twenty coins were received in donation from private sources.

The strength of the coin-collection of the Museum has now increased to 73 gold, 432 silver and 1493 copper coins, from a nucleus collection of 143 coins and medals which existed on the 21st March 1953, the day of opening of the Museum.

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1. Some of them are being published in this Volume. See pp. 303-308, *ante*.

2. *JNSI*, Alt. Comm. Vol., pp. 184-187.

Consolidated Chart showing the Collection of Coins in the M. G. M. Museum, Raipur

1	2	3 Gold	4 Silver	5 Copper etc.
Early indigenous coins of India: uninscribed	Punch-marked		28	63
	Repoussé		3	
	Cast and local coins of Eran and Ujjain			575
	Local coins of South Kosala			16
–do– inscribed	Coins of the city of Vidiśā			21
	Pāñchāla coins			1
	Sealing of Dhanadeva			1(clay)
Andhras etc.	Sātavāhanas			5
	Kushāṇas			24
	Western Kshatrapas		3	
	Nāgas of Padmāvatī			144
Gupta Empire	Narasimhagupta	1		
	Rāmagupta			5
	Jishṇu			3
	Prasannamātra	1		
	Mahendrāditya	46		
	Kramāditya	3		
Medieval Dynasties	Indo-Sassanian etc.		11	4
	Kalachuris	3	2	110
	South Indian	2		1
Sultans	Delhi Sultans		3	117
	Bahamani Sultans	1		32
	Gujarat Sultans		2	5
	Malava Sultans		25	141
Mughal Empire	Akbar to Shah Alam II		210	13
	Imitations	9	2	9
	Bhonsles of Nagpur		94	
	Orchha coins		2	6

Indo-British	William IV to George V.	1	8	49
	Medals	6	10	27
	Bhopal, Gwalior etc.		20	43
	Old seals of Bastar.		3	
Ancient Foreign	Chinese, Roman,Iranian			32
Modern Foreign	Various countries		6	46
	Total	73	432	1493

THE NUMISMATIC SECTION OF THE SANSKRIT UNIVERSITY MUSEUM, VARANASI

N. P. JOSHI

With the establishment of an Archaeological Museum in October 1958, we started to build up our numismatic collection for the guidance of our students The nucleus of it came from the liberal donations of Pt. Kubernath Shukla, Head of the Department of Education in this University. He presented a collection of 276 coins representing some of the important dynasties of Indian history. The Shukla collection was lacking in the coins of Indo-Bactrian, Indo-Scythian and Indo Parthian rulers. The lacuna was partially filled in by the Sitholey collection. This new collection of 90 coins, which came from Sri B. S. Sitholey, Lucknow, brought in some very beautiful specimens of currencies of the above-mentioned dynasties.

The University collection thus formed in its earlier stages continues to be enhanced both by donations and purchases. At present we have almost a thousand coins in our collection. A good number of them have been studied and catalogued. Recently the compilation of an inventory of these coins has also been taken up. A considerable number of coins have not been cleaned and are yet awaiting chemical treatment and cataloguing.

A rough and ready list of our coins is given below:

Coin type	Number of coins		Remarks	
Punch-marked	3,35		3,30	Æ
			5	Æ
Alexander	3			Æ
Greek coins (unidentified)	8			Æ
Indo-Bactrian	1	*Hermaeus*		Æ
Tribal coins	20			Æ
Coins of republican states	5	*Kauśāmbī*	1	Æ
		Avanti	2	
		Pañchāl	2	

Coin type	Number of coins	Remarks		
Achyuta	4			Æ
Uninscribed cast coins	26			Æ
Indo-Scythians	10	*Azes*	6	Æ AR
			2	Æ
		Azilises	2	AR
Indo-Parthians	3	*Gondophernes*	1	AR
			1	Æ
		Soter Megas	1	Æ
Kushāṇas	58	*Kujula*	2	Æ
		Vima	6	Æ
		Kanishka	14	Æ
		Huvishka	1	AV
			12	Æ
		Vasudeva	1	AV
			22	Æ
Kidar Kushāṇa	1			AV
Puri Kushāṇa	1			Æ
Nāga	1	*Gaṇapati*		Æ
Gupta	18	*Samudragupta*		
		Standard	1	AV
		Chandragupta II		
		Archer	2	AV
		Horseman	1	AV
		Kumāragupta I		
		Archer	3	AV
		Horseman	1	AV
		Skandagupta		
		Archer	1	AV
		Narsimhagupta		
		Archer	1	AV
		Uncertain	1	Brass
		,,	6	AR
Harsha	2			AR
Sassanian	1	*Khusru II*		AR
Indo-Sassanian	6			AR

Coin type	Number of Coins	Remarks		
Gāhaḍavālas	2	*Govindachandra*		Æ (debased)
Pratiharas	1	*Ādivarāha*		Æ
Kalachuri	1	*Gāṅgeyadeva*		Æ
Kings of Ohinda	12	*Sāmantadeva*	10	Æ
			2	Base
Kashmir :				
Utpala dynasty	2	Queen *Didda*	2	Æ
First Lohar dynasty	5	*Sangrama*	2	Æ
		Ananta	3	Æ
Second Lohara dynasty	4	*Sussaladeva*	1	Æ
		Jayasimhadeva	1	Æ
		Jayadeva	2	Æ
Rajaputa kings of Medieval India	1	*Hammira*		Æ

COINS OF THE POST-HINDU PERIOD

Slave dynasty	5	*Kutub-ud-din Aibak*	2	Æ
		Balban	1	AR
			1	Æ
		Kakobad	1	AR
Khilji dynasty	9	*Jala-ud-din*	1	AR
			2	Æ
		Ala-ud-din	1	AR
			5	Æ
Tughluq dynasty	15	*Ghiyas-ud-din*	1	AR
			1	Æ
		Muhammad	6	Æ
		Firoz	1	AR
			6	Æ
Lodi dynasty	7	*Bahlol*	1	Æ
		Sikandar	5	Æ
		Ibrahim	1	Æ

Coin type	Number of Coins	Remarks		
Sur dynasty	3	*Sher shah*	1	AR
			1	Æ
		Islam Shah	1	Æ
Mughal dynasty	23	*Akbar*	2	AR
			2	Æ
		Jahangir	3	AR
			1	Æ
		Aurangzeb	3	AR
			1	Æ
		Shah Alam	6	AR
			5	Æ
Maratha rulers	1	*Shivaji*		Æ
Nawabs of Awadh	5			AR
		MODERN PERIOD		
Nepal currency	2			Æ
Udaipur State	8			Æ
Tibet			5	AR
	10			Æ

THE COIN-COLLECTION IN WATSON MUSEUM, RAJKOT

J. M. NANAVATI

Established in 1888, Watson Museum, Rajkot, one of the oldest museums, enriched by many States of Kathiawar, naturally contains a rich collection of coins.

The collection at present consists of nearly 6000 coins, right from the early punch-marked to late native States coins, in which are included the coins of the Greeks, Western Kshatrapas, Guptas, Indo-Sassanians, Muslims and State Korries.

There are varieties in punch-marked coins of copper and silver. Greek coins are all copper coins of Apollodotus and Harmaeus. Śaka coins are of Maues, Azes I, Azes II, Vonones, Gondophares, Pakores, Basilus Soter and Soter Megas. Kshatrapa coins are all silver coins of almost all the kings from Bhumak to Rudrasen III. They are in all nearly 900 coins arranged and catalogued, including also seven copper coins of Bhumak. Gupta coins are nearly 800 in number and are of silver. They belong to Kumāragupta and Skandagupta. Mostly they are of *Garuḍa* and Peacock types. Indo Sassanian coins which are known as *Gadhaia* include both varieties, large size and small size. In addition to this, there are Muslim coins of copper and silver, mostly belonging to Delhi Sultans, Gujarat Sultans and Mughals. Finally, the collection also contains the coins of the Native States which include the Korries of Junagadh, Jamnagar, Porbandar and Kutch.

ADDENDA AND CORRIGENDA

I

Copper Coins of Devarāya II

(*JNSI*, XXII, pp. 202-204)

P. 203, para 3. The letter 'a' to be inserted between 'represent' and 'conch'.

II

Rupees of the Nawabs of Arcot from Mints in Administrative Regions, etc.

(*JNSI*, XXII, pp. 229-249)

P. 229, para 1. For '(*JNSI*, Vol. XXXI.', read '(*JNSI*, Vol. XXI)'.

P. 229, para 3. In the eleventh line, 'the' to be inserted between 'of' and 'mints'.

P. 230, para 6. In line two, read 'No. XVII, No. 104' for 'No. XXII, No. 104'.

P. 233. para 7. Lines one and two, read 'p. 146-173' for 'p. 146-170'.

P. 234, para 2. This paragraph should be amended as it does not agree with the text as submitted :

The first sentence should read : "I quote from an article entitled 'The History of the Madras Coast 1680-1690'..... Vol. III."

The second sentence should read : "In it he refers to the Mughal Conquests in the Eastern Karnatik and describes the earliest.....originated."

P. 234, para 3. Inverted commas to be inserted at "Golconda fell..... .

P. 238, para 4. In the description of the first rupee, insert after *Numismatic Supplement*— "No. XXXIX".

P. 245, para 5. In the third line, read "Porto Novo" for "Porto".

P. 247, para 5. Shah Alam Bahadur—read "(A.D. 1707-1712)".

Farrukhsiyar—read "(A. D. 1712-1719)."

III

Coins of the Dutch East India Company, etc.

(*JNSI*, XXII, pp. 291-292)

P. 291, para 6. Insert 'to' between 'referred' and 'above' in the first line.

IV

Coin-Weights of the East India Company

(*JNSI*, XXII, pp. 293-294)

P. 293, para 2. In line two, substitute 'the' for 'this' before *Journal*.

P. 293, para 2. The mint is not Farukhabad as stated in the description of the obverse. It appears as an abbreviation 'Fur.' on the coin-weight.

C. H. BIDDULPH

V

Notes on Gem-Seals with Kushāṇa Cursive Inscriptions in the Collection of the State Hermitage

(*JNSI*, XXII, pp. 102-108)

P. 102, note 1.

"For B. A. Livshitz, '*Sogdii skiĭ dokument* B-4 c. *gory Mug, Problemy Bosto Kovedeniya*, 1959, No. 6, pp. 124-129",

read "V. A. Livshitz, Sogdiyskiy dokument B-4 s gory Mugh, [The Sogdian document B-4 from mt. Mugh], Problemy Vostokovedeniya, 1959, No. 6, pp. 124-129".

P. 103, note 6.

For "*Soobsheheniya Gosudarst Vennogo Ermitazha, By puck, xxi*".

read "Soobshcheniya Gosudarstvennogo Ermitazha [The Bulletin of the State Hermitage], No. XX, 1961, pp. 54-56".

P. 105, note 1.

For "B. G. Lukonin", read "V. G. Lukonin".

For "*Eostoka*", read "Vostoka",

P. 105, note 4.

For "See n. 5 (ii)", read "See n. 5 (ii) on p. 102".

P. 105, note 5.

For "See n. 9", read "See n. 3 on p. 103".

P. 106, note 4.

For "(see n. 20)", read "(See n. 1 on p. 106)".

P. 107, line 7.

For "The Sardonix sealing", read "The Cornelian sealing".

P. 107, note 3.

For "See n. 4 (i)", read "See n. 4 (i) on p. 102".

P. 107, note 5.

For "See n. (5) (i)", read "See n. 5 (i) on p. 102".

P. 108, line 9.

For "Chalcedony seal", read "Sardonix seal".

P. 108, note 1.

For "See n. 18", read "See n. 4 on p. 104".

B. J. STAVISKY

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